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Delta Din-rail Power Meter DPM-DA510/DA530 User Manual

Delta Din-rail Power Meter DPM-DA510/DA530 User Manual

Revision History

Version	Revision	Date
1 st	The first version was published.	2020/10/16

Delta Din-rail Power Meter

DPM-DA510/DA530 User Manual

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Chapter 1 Product Overview

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1.1 Foreword

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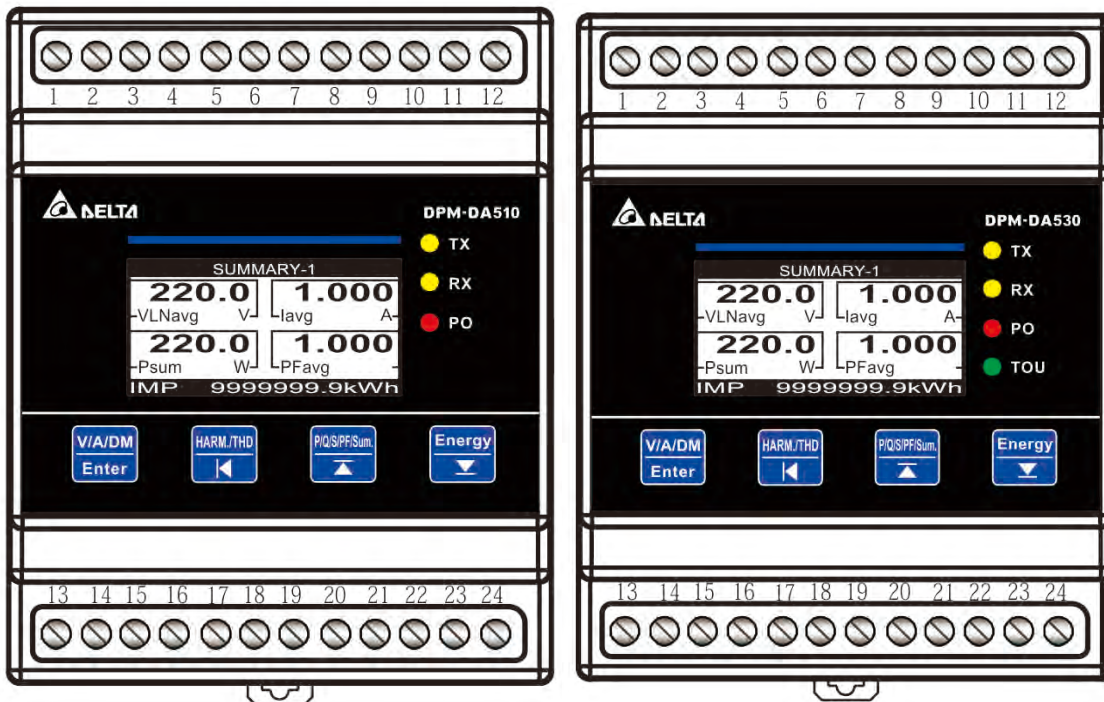
Thank you for using this product, this meter interface installation manual provides information on the DPM-DA530/510 meter. The DPM-DA530/510 multi-function control smart meter is used for power distribution (power system) monitoring and control in various industries. Suitable for measuring CATII power system. Before using, please carefully read this manual to ensure that it is used correctly. The following matters must be observed before you have read this manual. :

- The installation environment must be free of moisture, corrosive gases and flammable gases.
- When wiring, please follow the wiring diagram to explain the construction.
- The grounding project must be implemented, and the grounding must be carried out in accordance with the current state.
- Do not dismantle the meter or change the wiring while power is on.
- Do not touch the power supply during power-on operation to avoid electric shock.

If you still have problems using it, please contact your dealer or our customer service center. Due to the constant improvement of the product, please contact your dealer or the website (<http://www.delta.com.tw/ia/>) to download the latest version when the content specifications are corrected.

1.2 Outward & Instructions

The DPM-DA530/510 has a liquid crystal display screen that displays four measurement data per page



1.3 Warning & Criterion

- Beware of potential hazards. Wear safety equipment properly when operating this device and follow safety standards and related regulations for operating electric equipment.
- Installation of this device should be performed by licensed professionals. Perform operations only after carefully reading this manual.
- Power parameters for installing and using this device should be within rated specifications tolerated by the device.
- Do not operate alone.
- Power should be disconnected before installing, checking, or maintaining this device.
- You must use a voltage checking device with the correct rated values to ensure that all power has been disconnected.
- Before connecting power, check that all mechanical parts, covers, and doors have been returned to their original states. Make sure there are no parts or tools left inside the device.
- When using this device, short-circuiting is strictly forbidden for a secondary side of potential transformer (PT).
- When using this device, note that the current transformer(CT) must not be under an open circuit. °
- When using this device, make sure the powered bus on the secondary side of the current transformer has been locked and secured to the device to prevent the bus falling during the use, which could damage the device.
- When measuring current, a current transformer must be used with the device.
- When the measured voltage exceeds the rated range (line voltage of 35~600V AC L-L, phase voltage: 20~350V AC L-N) for this device, a potential transformer must be used with the device.
- This device should be installed in a properly-insulated fire-protection cabinet.
- Disconnect all wiring (or power off all other circuits) that may present potentially hazardous voltage levels to the unit when cleaning the power meter. Ensure to use a dry and soft cotton cloth to wipe the surface of the power meter carefully.
- Operate this device according to this manual to prevent improper operation that may cause damage and bodily harm.

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Chapter 2 Specifications

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2.1 Electrical Specification

Accuracy Class					
Quantity of electricity	Voltage	0.5 %	Electrical energy	Active energy	0.5 %
	Current	0.5 %		Reactive energy	2.0 %
	Active power	0.5 %		Apparent energy	2.0 %
	Reactive power, apparent power	2.0 %	Total harmonics in current	1.0 %	
Power factor		0.5 %	Total harmonics in voltage		1.0 %
Active power demand		0.5 %	Frequency accuracy		0.5 %
Apparent power demand		2.0 %	Reactive power demand		2.0 %
Input					
Wiring method	Single-phase two-wire, 1 CT		Three-phase three-wire, Δ Delta-connection, 2 CT, 2 PT		
	Single-phase three-wire, 2 CT		Three-phase three-wire, Δ Delta-connection, 1 CT, 2 PT		
	Three-phase three-wire, Δ Delta-connection, 3 CT, No PT		Three-phase four-wire, Y-connection, 3 CT, 3 PT		
	Three-phase three-wire, Δ Delta-connection, 2 CT, No PT		Three-phase four-wire, Y-connection, 1 CT, 3 PT		
	Three-phase three-wire, Δ Delta-connection, 1 CT, No PT		Three-phase four-wire, Y-connection, 3 CT, No PT		
	Three-phase three-wire, Δ Delta-connection, 3 CT, 2 PT		Three-phase four-wire, Y-connection, 1 CT, No PT		
Voltage	Rated value	Line voltage: 35 ~ 600 VAC (L-L)			
		Phase voltage: 20 ~ 350 VAC (L-N)			
Current	Rated value	1A / 5A			
Frequency	45 ~ 65 Hz				
Alarm*	Alarm parameters selectable	36 kinds of alarms selectable			
Max/Min*	44/40	Max/Min, Time stamp			
Power	Functional Range	100 ~ 240 VAC \pm 10% (Power consumption \leq 3VA) 100 ~ 250 VDC \pm 10% (Power consumption \leq 2W)			
Frequency	Working Power Frequency	50/60 Hz			
Communication Interface	RS-485 Interface	MODBUS-RTU			
		Baud Rate 1200 / 2400 / 4800 / 9600 / 19200 / 38400 / 57600 / 115200 bps			

Exterior	Dimensions (W x H x D)	72 x 87.5 x 58.7 mm
	IP Protections	IP20
Environment	Operating Temperature	0 °C ~ +60 °C (32°F ~ +140°F)
	Storage Temperature	-10 °C ~ +70 °C (14°F ~ +158°F)
	Relative Humidity	5 ~ 95 % RH Non-condensing
	Altitude	Below 2000 meters

*DA510 not available

Display	
Screen display type	LCD display
Background light	White backlight

Electromagnetic compatibility	
Electrostatic discharge	IEC 61000-4-2:2008
Immunity to radiated fields	IEC 61000-4-3:2006+A1:2007+A2:2010
Immunity to fast transients	IEC 61000-4-4:2012
Immunity to impulse waves	IEC 61000-4-5:2005
Conducted immunity	IEC 61000-4-6:2013
Immunity to magnetic fields	IEC 61000-4-8:2009
Immunity to voltage dips	IEC 61000-4-11:2004
Conducted and radiated emissions	FCC part 15 subpart B Class A
Harmonics emissions	EN 61000-3-2:2014
Flicker emissions	EN 61000-3-3:2013

2.2 Communication Specification

Communication	
RS-485	Modbus RTU
Baud Rate	1200 / 2400 / 4800 / 9600 / 19200 / 38400 / 57600 / 115200 bps

2.3 Operation Interface

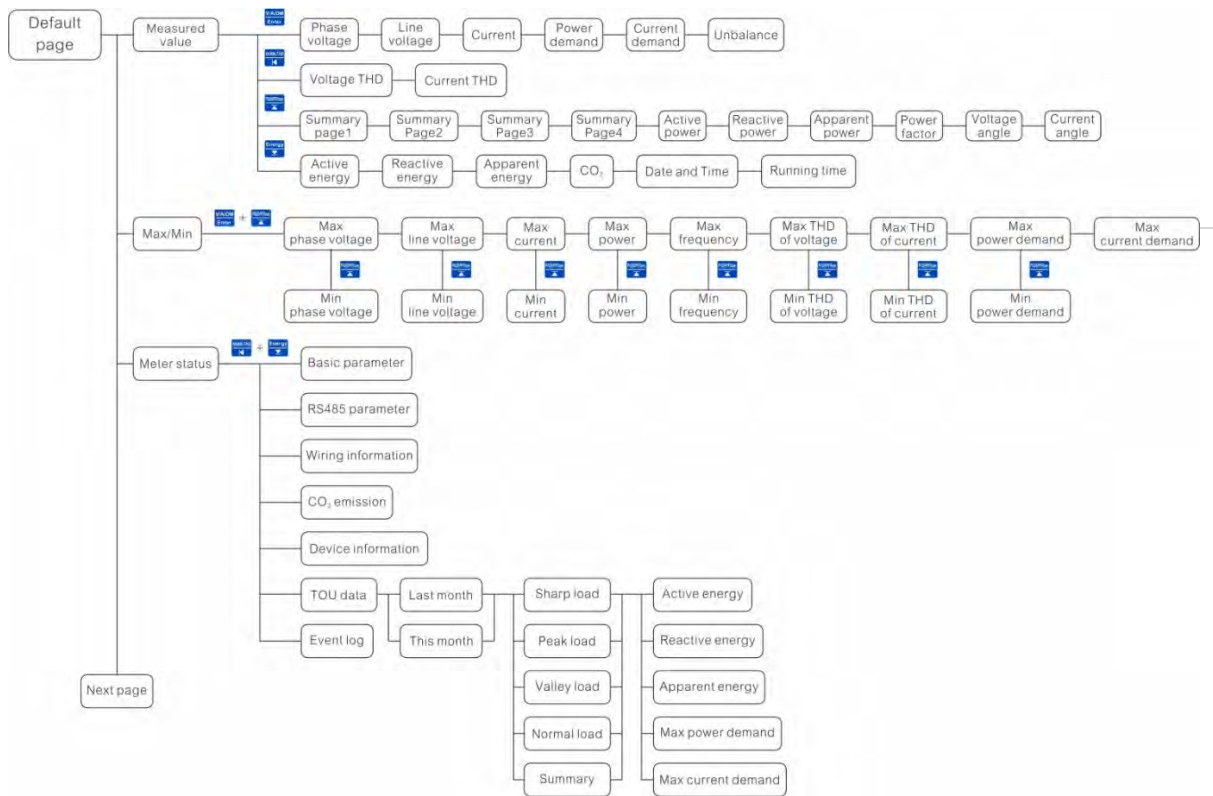
The diagram shows the DPM-DA530/510 operation interface. The screen displays 'SUMMARY-1' with various data points: 220.0, 1.000, 220.0, 1.000, and 9999999.9kWh. The keypad has four buttons: V/A/DM/Enter (C), HARM/THD (D), Pcos/PPSum (E), and Energy (F). Labels A through J point to specific elements: A (Title), B (Display area), C (ENTER key), D (LEFT key), E (UP key), F (DOWN key), G (TX light), H (RX light), I (PULSE light), and J (TOU light).

A.	Title	H	RX light
B.	Display area	I.	PULSE light
C.	ENTER key	J.	TOU light (DA510 does not have this light)
D.	LEFT key		
E.	UP key		
F.	DOWN key		
G.	TX light		

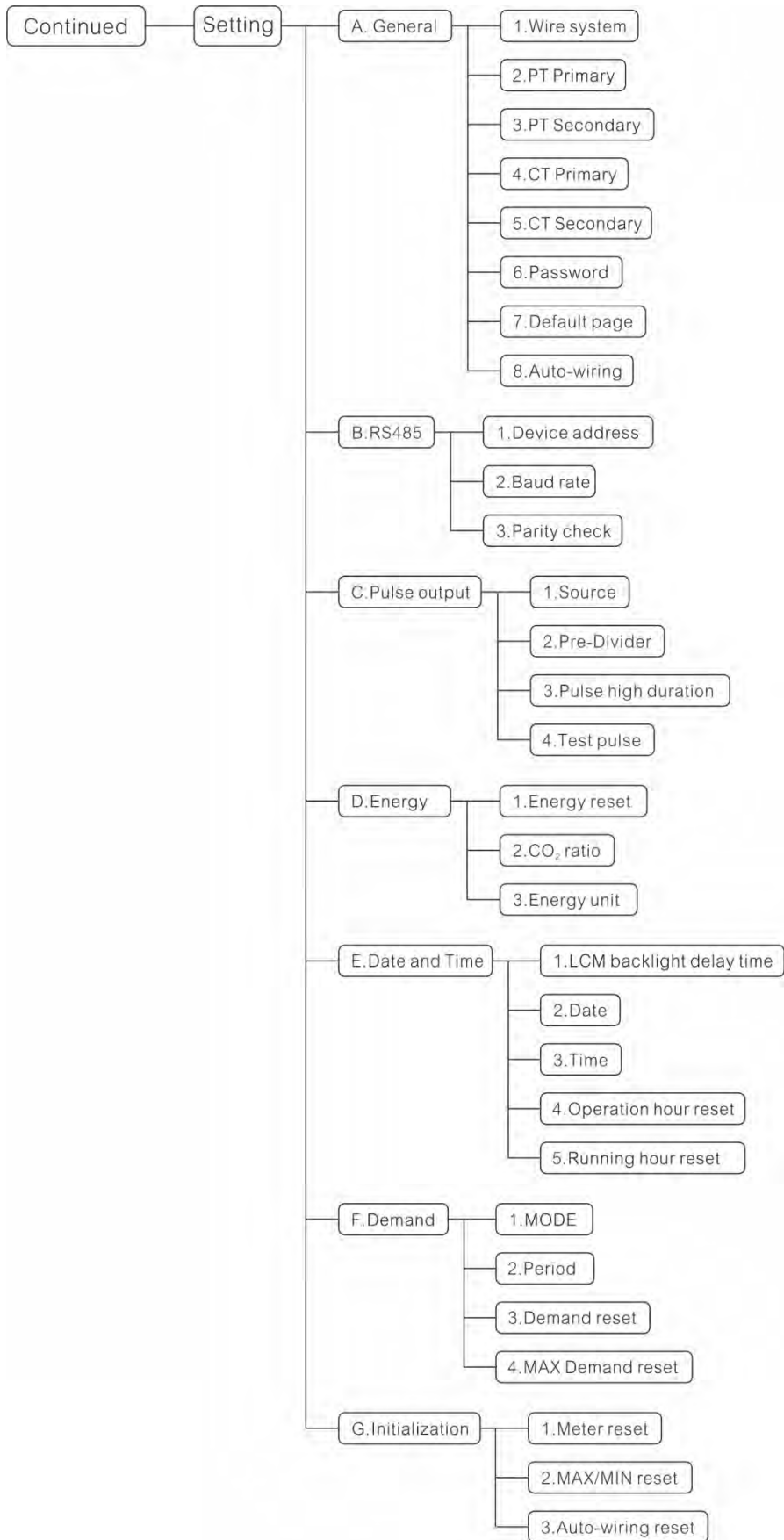
Button Name	General Mode	Configuration Mode
ENTER key	Voltage / Current / Demand / Unbalance / Quick search key	Confirm the input and return to the previous page
LEFT Key	THD quick search key	Press 2 Sec back to previous menu
UP Key	Summary / Power / Power factor / Phase angle quick search key	Select item or increase number
DOWN Key	Energy / CO2 / Time / Running time quick search key	Select item or decrease number

2.3.1 Interface Tree

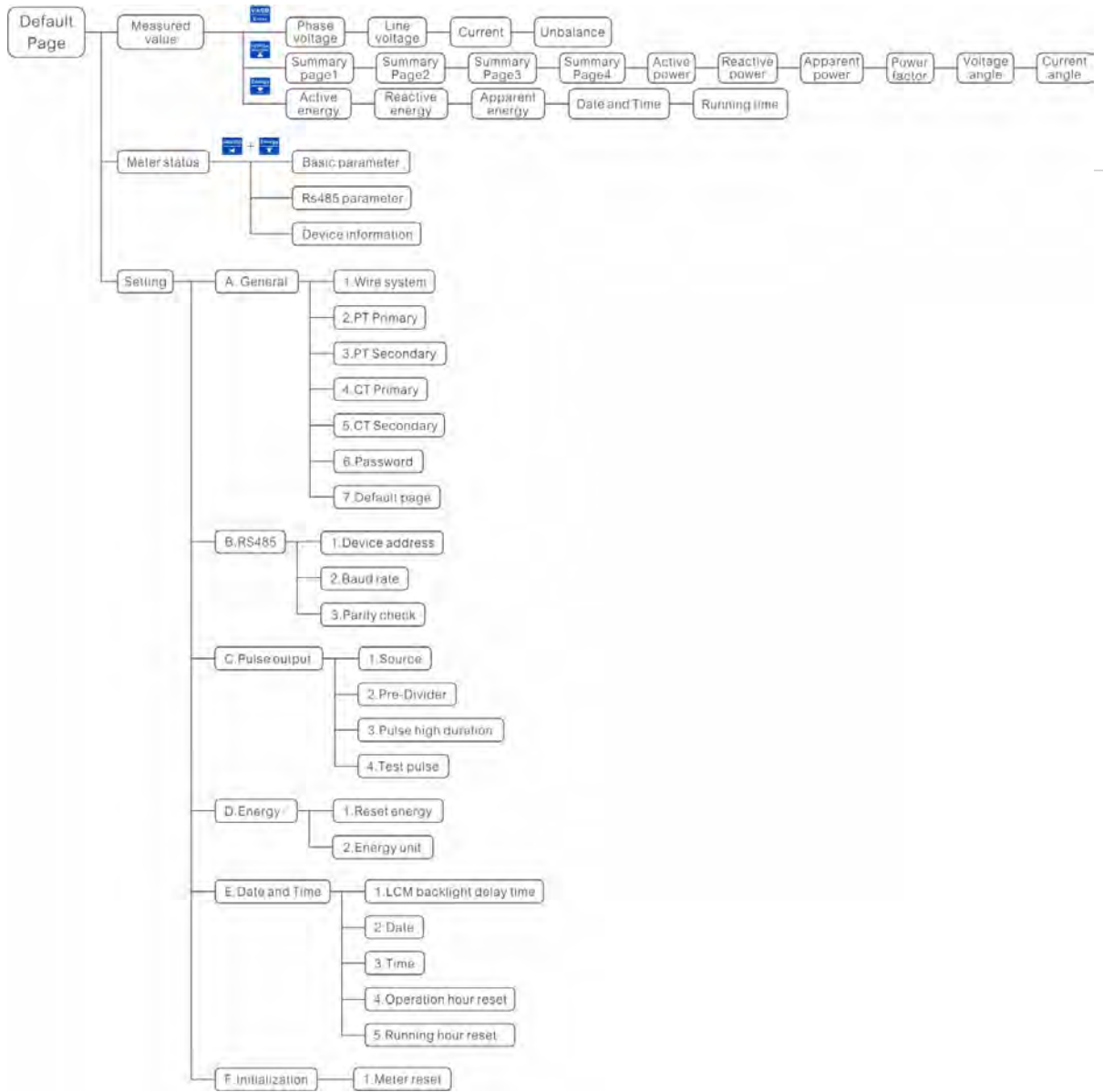
Display UI interface tree-DA530



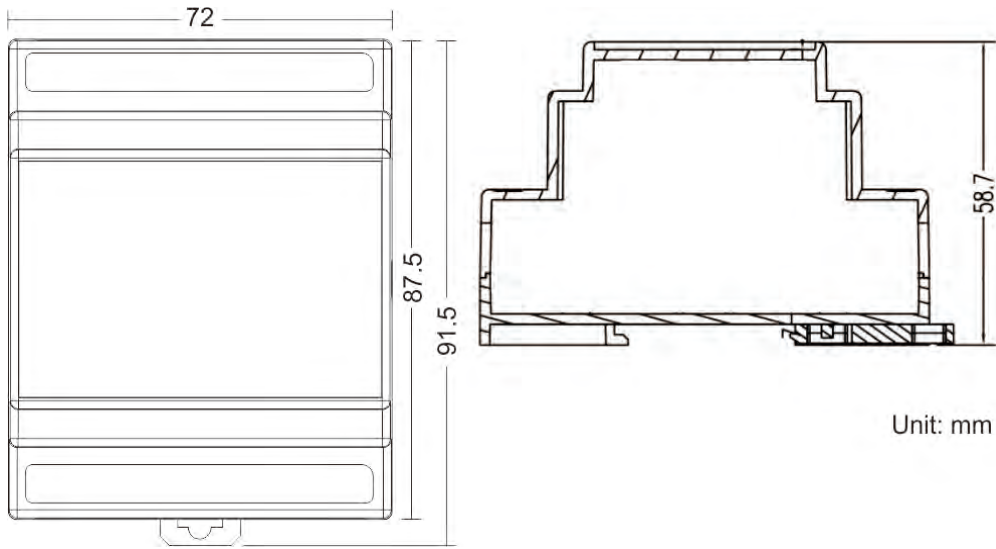
Setting UI interface tree-DA530



Setting UI interface tree-DA510



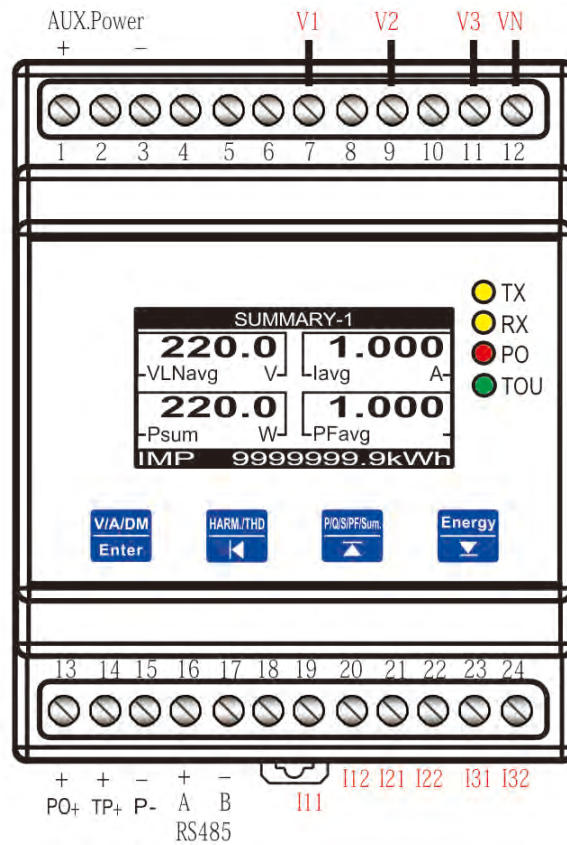
2.4 Physical Dimensions



Unit: mm

unit : mm[inch.]

Rear view :



※DA510 and DA530 have the same external and terminal.

Chapter 3 Installation

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3.1 Installation method

3.1.1 Environment

This product must be placed in the box when it is not in use. If it is not used for the time being, in order to make the product conform to the warranty scope and future maintenance of the company, please pay attention to the following matters during storage. :

- Must be placed in a dust-free, dry place.
- The ambient temperature in the storage location must be in the range of -10°C to +70°C (14°F to 158°F).
- The relative humidity in the storage location must be in the range of 5% to 95% without condensation.
- Avoid storage in environments containing corrosive gas and liquids.
- It is best to properly store in a rack or countertop.
- Suitable installation environments for this product include: places where there is no high heat device; locations where there is no water droplets, vapors, dust, and oily dust; places where there is no corrosion, flammable gas, liquids; and where there is no floating dust and metal particles Places; Strong, vibration-free, electromagnetic noise-free places.

3.1.2 Remind

- Installation method must be in accordance with the regulations, or it will malfunction.
- In order for the cooling loop to work well, when installing the electric meter, it is necessary to keep sufficient space between the upper and lower side of the meter and the adjacent items and baffles (wall) or it will cause poor heat dissipation.

3.2 Basic Test

Test item	description
General testing	<ul style="list-style-type: none"> ■ Heat sink holes should be avoided by foreign substances such as oil, water or metal powder and should be prevented from falling into the electric meter. ■ If the electric meter is set up in a place where harmful gases or dust are present, it shall prevent the intrusion of harmful gases and dust.
Pre-operation (No control power supply)	<ul style="list-style-type: none"> ■ Please insulate the connection part of the wiring terminal. ■ The communication wiring should be correct, otherwise abnormal actions may occur. ■ Check for conductive or flammable objects such as screws or metal plates inside the meter. ■ When the electronic instrument used near the meter is subjected to electromagnetic interference, adjust the instrument to reduce electromagnetic interference. ■ Please make sure the meter's supply voltage level is correct.
Pre-operation (Control power supplied)	<ul style="list-style-type: none"> ■ Whether the communication with each device is normal. ■ If the meter is abnormal, please contact your dealer or our customer service center.

3.3 Wiring instructions

3.3.1 Circuit wiring

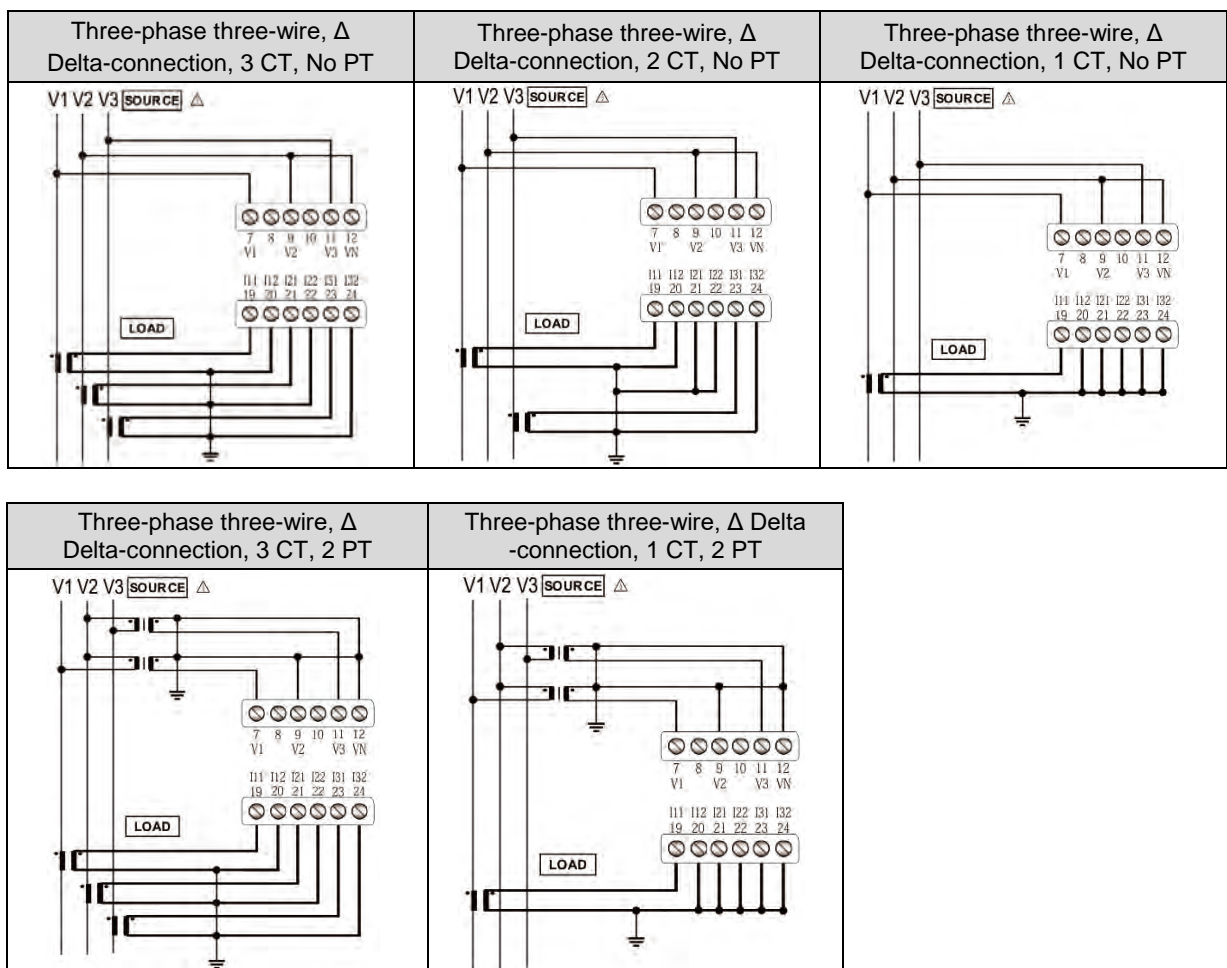
- **Precautions :**

1. To avoid electric shock, do not change the wiring while the power is on.
2. Since the power meter does not have a power switch, be sure to install a circuit breaker switch on the power cord of the meter.
3. Measuring Voltage: When the measuring voltage is higher than the rated specification range that this equipment can carry, must use an external voltage transformer (PT).
4. Measuring current: Measuring the current requires the use of an external current transformer (CT).

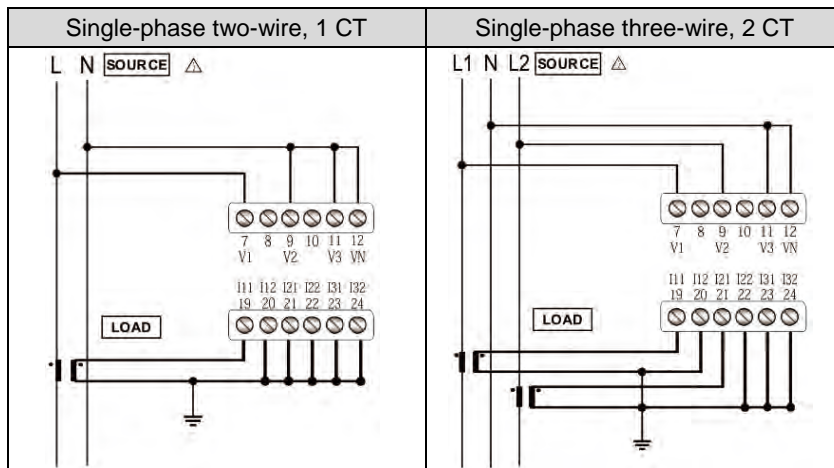
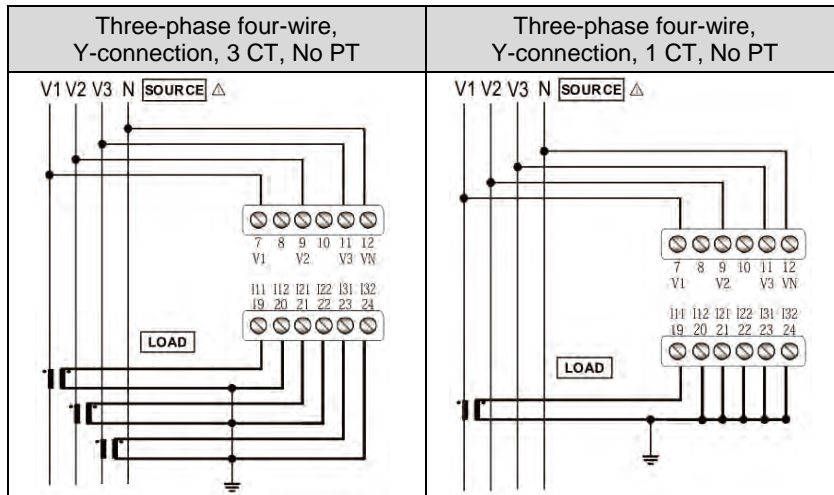
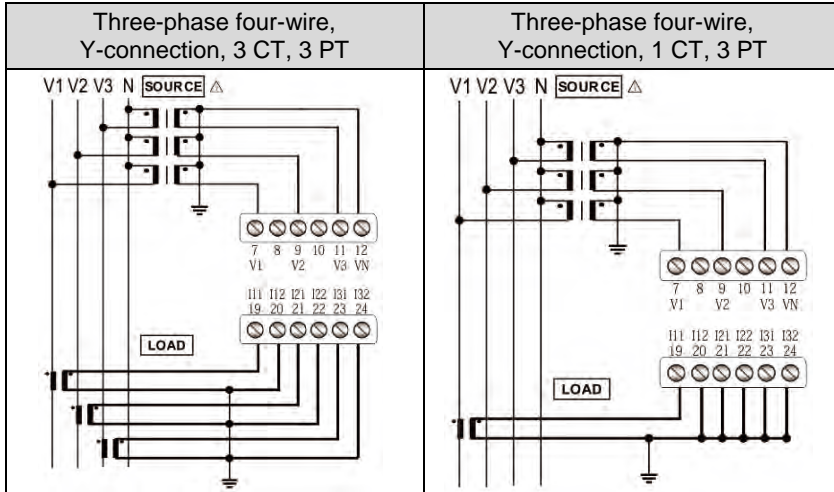
The recommended wiring material is as follows :

Terminal Block	Wire gauge	Screw torque	Wire temperature resistance
Measuring current \ RS-485 \ PO	AWG 22 ~ 18	5.2 kgf-cm (0.5 N-m)	70°C or higher
Measured Voltage \ Measured Current	AWG 22 ~ 18	5.2 kgf-cm (0.5 N-m)	70°C or higher

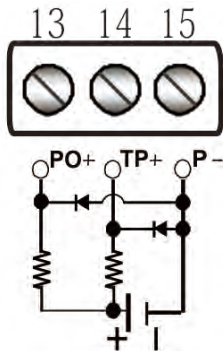
- **Wiring method :**






3



- PO wiring method



Use the following symbol in the figure :

Symbol			
Description	GND	CT	PT

3.3.2 Communication Property

- Communication Specifications :

Max distance of communication	1200 m	Baud Rate	1200、2400、4800、9600、 19200、38400、57600、 115200
Max number of connected stations	32	Data Bit	8
Communication Protocols	MODBUS RTU	Parity	None, Odd, Even
Functional Code	03, 06, 10	Stop Bit	1、2

- Communication property of RS-485 must be use twist-pair.
- The communication property D+ terminal of all devices needs to be connected to the same twisted-pair , the D- terminal needs to be connected to another twist-pair, the isolation net ground treatment, and the terminal equipment needs to be loaded with terminal resistance.
- Please use 22~18 AWG at wiring terminal.

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4.1 General Operations

4.1.1 Reading Measured Data

4.1.1.1 ENTER Quick Search Key

Press ENTER to poll the page between the following item parameters.

On any measurement page, press and hold the LEFT key for 2 seconds and return to the default page (Summary).

- V L-N Measurement: Parameter of phase voltage measured by the power meter, including Voltage A-N (V1) \ Voltage B-N (V2) \ Voltage C-N (V3) \ Phase Voltage Average (Vavg).
- V L-L Measurement: Parameter of line voltage measured by the power meter, including Line Voltage AB (U12) \ Line Voltage BC (U23) \ Line Voltage CA (U31) \ Line Voltage Average (Uavg).
- Current Measurement: Parameter of current measured by the power meter, including Current A (I1) \ Current B (I2) \ Current C (I3) \ Current Average (Iavg) \ Natural Current (IN).
- Power Demand Measurement: Parameter of power demand measured by the power meter, including Active Power Demand (P) \ Reactive Power Demand (Q) \ Apparent Power Demand (S).

※DA510 DOES NOT HAVE THIS FUNCTION.

- Current Demand Measurement: Parameter of power demand measured by the power meter, including Current A (I1) \ Current B (I2) \ Current C (I3) \ Current Average (Iavg).

※DA510 DOES NOT HAVE THIS FUNCTION.

- Voltage L-N unbalance Measurement: Parameter of unbalance measured by the power meter, including Voltage (U) \ Current (I).

4.1.1.2 LEFT Quick Search Key

Press LEFT to poll the page between the following item parameters.※DA510 DOES NOT HAVE THIS FUNCTION.

On any measurement page, press and hold the LEFT key for 2 seconds and return to the default page (Summary).

- Phase voltage harmonic and average voltage harmonic Measurement (Voltage THD): Phase voltage harmonic measured by the power meter, including Voltage A-N (V1) \ Voltage B-N (V2) \ Voltage C-N (V3) \ phase voltage average (Vavg).
- Phase current harmonic and current average harmonic Measurement (Current THD): Phase current harmonic measured by the power meter, including Current A (I1) \ Current B (I2) \ Current C (I3) \ current average (Iavg).

4.1.1.3 UP Quick Search Key

Press UP to poll the page between the following item parameters.

On any measurement page, press and hold the LEFT key for 2 seconds and return to the power meter default page (Summary).

- Summary-1 Measurement: Parameter of summary display measured by the power meter, including phase voltage average (VLNavg) \ current average (Iavg) \ active power total (Psum) \ power factor average (PFavg) \ active energy import (IMP).
- Summary-2 Measurement: Parameter of summary display measured by the power meter, including line voltage

average (VLLavg) \ current average (Iavg) \ active power total (Psum) \ power factor average (PFavg) \ active energy import (IMP).

- Summary-3 Measurement: Parameter of summary display measured by the power meter, including active power total (Psum) \ reactive power total (Qsum) \ apparent power total (Ssum) \ power factor average (PFavg) \ active energy import(IMP).
- Summary-4 Measurement: Parameter of comprehensive display measured by the power meter, including active power total (Psum) \ reactive power total (Qsum) \ Apparent power total (Ssum) \ frequency(Freq) \ active energy import (IMP).
- Active Power Measurement: Parameter of active power measured by the power meter, including active power (P1) \ active power (P2) \ active power (P3) \ active power total(Psum).
- Reactive Power Measurement: Parameter of reactive power measured by the power meter, including reactive power (Q1) \ reactive power (Q2) \ reactive power (Q3) \ reactive power total(Qsum).
- Apparent Power Measurement: Parameter of apparent power measured by the power meter, including apparent power (S1) \ apparent power (S2) \ apparent power (S3) \ Apparent power total(Ssum).
- Power Factor Measurement: Parameter of power factor measured by the power meter, including power factor (PF1) \ power factor (PF2) \ power factor (PF3) \ power factor average(PFavg).
- L-N Voltage Angle Measurement: Parameter of phase voltage phasor diagram measured by the power meter, including phase voltage phasor diagram (V1-V1) \ phase voltage phasor diagram (V2-V1) \ phase voltage phasor diagram (V3-V1).
- L-L Voltage Angle Measurement: Parameter of line voltage phasor diagram measured by the power meter, including line voltage phasor diagram (V12-V12) \ line voltage phasor diagram (V23-V12) \ line voltage phasor diagram (V31-V12).
- Current Angle Measurement: Parameter of current phasor diagram measured by the power meter, including current phasor diagram (I1-V1) \ current phasor diagram (I2-V1) \ current phasor diagram (I3-V1).

4.1.1.4 Down Quick Search Key

Press Down to poll the page between the following item parameters.

On any measurement page, press and hold the LEFT key for 2 seconds and return to the default page (Summary).

- Active Energy Measurement: Active energy measured by the power meter, including active energy import (IMP) \ output active energy (EXP) \ total active energy (TOT) \ active energy net(NET).
- Reactive Energy Measurement: reactive energy measured by the power meter, including input reactive energy (IMP) \ output reactive energy (EXP) \ total reactive energy (TOT) \ reactive energy net(NET).
- Total Apparent Energy Measurement: total apparent energy (TOT).
- CO₂ Emission Measurement: CO₂ emission measured by the power meter (CO₂).※DA510 DOES NOT HAVE THIS FUNCTION.
- Date & Time Measurement: Date & time measured by the power meter, including Date \ Time.
- Hour Meters Measurement: Hour measured by the power meter, including operation hour (OPE) \ run hour (RUN).

4.1.2 MAX/MIN Search

※DA510 DOES NOT HAVE THIS FUNCTION.

Press ENTER+UP key at the same time can query the maximum minimum value of the parameter.

Press ENTER to poll the page between the following item parameters.

Press UP key can select to switch the MAX and MIN page.

On any measurement page, press and hold the LEFT key for 2 seconds and return to the default page (Summary).

- MAX/MIN measured by the power meter, including Voltage L-N 、 Voltage L-L 、 Current 、 Power 、 Frequency 、 THD of Voltage 、 THD of Current 、 Power Demand Current Demand.

※The current demand is only the maximum value.

4.1.3 Power Meter Info Search

Press LEFT+DOWN key at the same time can query the intableation and settings of the meter.

Press UP or DOWN key to select the item to be queried 、 press ENTER key to enter item page.

On any measurement page, press and hold the LEFT key for 2 seconds and return to the

- SYSTEM INFO:
 1. BASIC PARAMETER
 2. RS485 PARAMETER
 3. WIRING INFO ※DA510 DOES NOT HAVE THIS FUNCTION.
 4. CO₂ EMISSION ※DA510 DOES NOT HAVE THIS FUNCTION.
 5. DEVICE INFO
 6. TOU DATA ※DA510 DOES NOT HAVE THIS FUNCTION.
 7. EVENT LOG ※DA510 DOES NOT HAVE THIS FUNCTION.

4.1.4 USER PASSWORD

- Type Password: The user of the power meter operates the password lock. The factory value is 1000.
- Steps of setup are as follows:
 1. Press ENTER+DOWN key at the same time, type password after 4 zeros appear.
 2. Press UP or DOWN key to select the first digit of the user password.
 3. Press LEFT key, move to the next digit of the user password.
 4. Repeat step 2 to 3 until finishing the 4-digit of the user password.
 5. After entering the 4th digit of the user password, press ENTER key to enter meter parameter setting.
- ※ If type error, the number can be re-entered after 4 zeros.
- ※ If you need to exit the user password page, press and hold the LEFT key for 2 seconds back to default page (Summary).

4.1.5 General

4.1.5.1 Wire System

- Wire System: The wire system method can be selected are single-phase two-wire (1P2W), single-phase three-wire (1P3W), three-phase three-wire 1CT (3P3W1CT), three-phase three-wire 2CT (3P3W2CT), three-phase three-wire 3CT (3P3W3CT), three-phase four-wire 1CT (3P4W1CT), three-phase Four-wire 3CT (3P4W3CT), The factory value is three-phase four-wire 3CT (3P4W3CT).
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter wire system setting.
 2. Press UP or DOWN to select the wire system method.
 3. Press ENTER key to finish setting and back to menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.5.2 Voltage Transtableer Setting

- Primary PT: The volt of PT primary can be selected range is 100~1200000 V · The factory value is 500 V.
- Secondary PT: The volt of PT secondary can be selected range is 50~500 V · The factory value is 500 V.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter the volt of PT primary setting.
 2. Press UP or DOWN key to select the volt.
 3. Press LEFT key and move on to the next digit.
 4. Repeat step 2 to 3 until finishing volt setting, press ENTER key to save and return to the menu.
 5. Press ENTER key to enter the volt of PT secondary setting.
 6. Press UP or DOWN key to select the volt.
 7. Press LEFT key and move on to the next digit.
 8. Repeat step 6 to 7 until finishing volt setting, press ENTER key to save and return to the menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.5.3 Current Transtableer Setting

- Primary CT: Ampere of primary CT, can be selected range is 1~9999 A. The factory value is 5 A.
- Secondary CT: Ampere of secondary CT, can be selected range is 1 A or 5 A. The factory value is 5 A.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter the ampere of CT primary.
 2. Press UP or DOWN key to select the ampere.
 3. Press LEFT key and move on to the next digit.
 4. Repeat step 2 to 3 until finishing ampere setting, press ENTER key to save and return to the menu.
 5. Press ENTER key to enter the ampere of CT secondary.
 6. Press UP or DOWN to select the ampere.
 7. Press ENTER key to finish setting and back to menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.5.4 Modify PASSWORD

- Change user password, and the default value is 1000.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter password setting.
 2. Press UP or DOWN key to select the password number.
 3. Press LEFT key and move on to the next digit.
 4. Repeat step 2 to 3 until finishing password setting, press ENTER key to save and return to the menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.5.5 Default Page Setting

- Default Page: The default page of the power meter can be selected by Summary-1 (phase voltage average/current average/active power total/power factor average/active energy import) · Summary-2 (line voltage average/current average/active power total/power factor average/active energy import) · Summary-3 (active power total/reactive power total/Apparent power total/power factor average/active energy import) · Summary-4 (active power total/reactive power total/Apparent power total/frequency/active energy import) · The factory value is Summary-1.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter the default page setting.
 2. Press UP or DOWN to select the default setting.
 3. Press ENTER key to save and return to the menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.5.6 Auto Wiring

※DA510 DOES NOT HAVE THIS FUNCTION.

- Auto Wiring: The power meter can automatically adjust the corresponding voltage phase to the current phase according to the actual wiring status, and then adjust the voltage phase to the current phase, without the need to modify the solid wiring.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter auto wiring.
 2. Press UP or DOWN to select the YES, start to auto wiring.
 3. Press UP or DOWN to select the power mode is input (IMP) or output (EXP).
 4. Press ENTER key and start calculating active power.
 5. When the calculation is complete, the phase and the active power total are displayed.
 6. According to the calculation result, press UP or DOWN key. The result is correct selection of YES, incorrect selection of NO.
 7. Select NO, then repeat steps 5~6 and recalculate active power.
 8. Select YES, and then start to calculate reactive power.
 9. When the calculation is complete, the phase and the reactive power total are displayed.
 10. According to the calculation result, press UP or DOWN key. The result is correct selection of YES, incorrect selection of NO.
 11. Select NO, then repeat steps 5 ~ 10 and recalculate active power.
 12. Select YES, and then display wire result.
 13. Press UP or DOWN to select the Save or Quit and return to menu.

-
14. If the correct active power and reactive power data have not been obtained, it will display "Fail" to adjust the wire. Press ENTER to exit and return to the menu.
 - ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.
 - ※ Auto wire adjustment has the following restrictions in different phase wire systems:
 - 1P2W: $\theta < \pm 59^\circ$
 - 1P3W: VN need to be properly connected and $\theta < \pm 59^\circ$
 - 3P3W-1CT: Unable to portable software auto wire method.
 - 3P3W-2CT: V2 need to be properly connected and $\theta < \pm 59^\circ$
 - 3P3W-3CT: V2 need to be properly connected and $\theta < \pm 59^\circ$
 - 3P4W-1CT: $\theta < \pm 59^\circ$
 - 3P4W-3CT: VN need to be properly connected and $\theta < \pm 59^\circ$
 - ※ Auto wire is accessible, enabling incorrect wiring to get the correct data under limited conditions after calculation. If the correct data is not available during the auto wire process, it is possible that the system wiring error situation exceeds the condition limit, in which case the actual wiring still needs to be adjusted manually.

4.1.6 Communication Setting (RS485)

4.1.6.1 Communication Device Address (Address)

- Power meter device address setting. The selectable range is 1~247. Broadcast is 255. The factory value is 1.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter address setting.
 2. Press UP or DOWN key to select the address.
 3. Press LEFT key and move on to the next digit.
 4. Repeat step 2 to 3 until finishing 3-digit setting of communication device address, press ENTER key to save and return to the menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.6.2 Baud Rate

- Baud rate setting. The selectable range is 1200 \ 2400 \ 4800 \ 9600 \ 19200 \ 38400 \ 57600 \ 115200 bps. The factory value is 9600 bps.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter baud rate.
 2. Use UP and DOWN key to select required baud rate.
 3. Press ENTER key to finish setting and back to menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.6.3 Parity Bit

- Communication parity check bit setting. The selectable range is N.8.1 \ N.8.2 \ O.8.1 \ E.8.1. The default is N.8.2.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter parity bit setting.
 2. Use UP and DOWN key to select required parity bit setting.
 3. Press ENTER key to finish setting and back to menu.

- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.7 Pulse Output

4.1.7.1 Source

- Selects the parameters on which the pulse output is based and the parameters that you can select have active energy import (Active ENG-IMP) \ output active energy (Active ENG-EXP) \ input reactive energy (Reactive ENG-IMP) \ output reactive energy(Reactive ENG-EXP), also can choice turn off output (OFF). The factory value is active energy import.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter source setting.
 2. Press UP or DOWN to select the based on the parameters.
 3. Press ENTER key to finish setting and back to menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

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4.1.7.2 Pulse Output Pre-Divider

- Pulse output pre-divider setting. The selectable range is 1 ~ 9999 \ The factory value is 1.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter pre-divider setting.
 2. Press UP or DOWN key to select the pre-divider number.
 3. Press LEFT key and move on to the next digit.
 4. Repeat step 2 to 3 until finishing 4-digit of pre-divider number setting, press ENTER key to save and return to the menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.7.3 High Potential Time (Duration)

- Pulse output high potential time setting can be selected range is 0 ~ 5000 mS, 0 means 50% of the high and low potentials. The factory value is 0.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter high potential time setting.
 2. Press UP or DOWN key to select the high potential time number.
 3. Press LEFT key and move on to the next digit.
 4. Repeat step 2 to 3 until finishing 4-digit setting of high potential time, press ENTER key to save and return to the menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.7.4 Test Pulse

- Select the parameters on which the check pulse output is based, and the parameters you can select are Active Energy \ Reactive Energy. The factory value is active energy. The pulse output is fixed is 1600 Pulse / kWh. Duty ratio is 50%.

- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter test pulse setting.
 2. Use UP and DOWN key to select based on the parameter.
 3. Press ENTER key to finish setting and back to menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.8 Energy

4.1.8.1 Energy Reset

- Clear all energy accumulation. Clear password is 2100.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter energy reset setting.
 2. Press UP or DOWN key to select the 1-digit of energy reset number.
 3. Press LEFT key move to next digit.
 4. Repeat step 2 to 3 until finishing password 4-digits, press ENTER key to save and return to the menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.8.2 CO₂ Ratio

※DA510 DOES NOT HAVE THIS FUNCTION.

- CO₂ emissions per kilowatt-hour setting. The selectable range is 0 ~ 60.000 · The factory value is 0.638.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter CO₂ ratio setting.
 2. Press UP or DOWN key to select the CO₂ ratio.
 3. Press LEFT key and move on to the next digit..
 4. Repeat step 2 to 3 until finishing CO₂ ratio 5-digits setting, press ENTER key to save and return to the menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.8.3 Energy Unit

- Energy unit setting can be selected unit are 0.0001kWh · 0.001kWh · 0.01kWh · 0.1kWh · 1kWh · 0.01MWh · 0.1MWh. The factory value is 0.1kWh.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter the energy unit setting.
 2. Use UP and DOWN key to select energy unit.
 3. Press ENTER key to finish setting and back to menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.9 Date/Time

4.1.9.1 Backlight

- Backlight display setting. The selectable range is 0 ~ 15 minutes, 0 means constant light. The factory value is 1.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter the backlight setting.
 2. Press UP or DOWN key to select the 1-digit of backlight.
 3. Press LEFT key and move on to the next digit.
 4. Repeat step 2 to 3 until finishing backlight 2-digital, press ENTER key to save and return to the menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.9.2 Date

- Date setting. The selectable range is 2000/1/1 ~ 2099/12/31.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter the date setting.
 2. Press UP or DOWN key to select the number.
 3. Press LEFT key and move on to the next digit.
 4. Repeat step 2 to 3 until finishing date 8-digits setting, press ENTER key to save and return to the menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.9.3 Time

- Time setting. The selectable range is 00: 00: 00 ~ 23: 59: 59.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter the time setting.
 2. Press UP or DOWN key to select the number.
 3. Press LEFT key and move on to the next digit.
 4. Repeat step 2 to 3 until finishing date 6-digits setting, press ENTER key to save and return to the menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.9.4 OPE-Hour Reset

- Clear the accumulated of operation hour reset.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter operation hour reset setting.
 2. Use UP and DOWN key to select "YES" for clear or "NO" for leave.
 3. Press ENTER key to finish setting and back to menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.
- ※ The operation hour starts to accumulate after the meter is powered on.

4.1.9.5 RUN-Hour Reset

- Clear the accumulated of running hour reset.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter running hour reset.
 2. Use UP and DOWN key to select “YES” for clear or “NO” for leave.
 3. Press ENTER key to finish setting and back to menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.
- ※ The operating time is when the current input value of the meter measurement exceeds 1% of the rated value and begins to accumulate.

4.1.10 Demand

※DA510 DOES NOT HAVE THIS FUNCTION.

4.1.10.1 Demand Calculation Mode (Mode)

- Demand calculation mode setting. The mode that can be set are sliding block (Slide) · fixed block (Fix) · The factory value is sliding block.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter demand mode setting.
 2. Use UP and DOWN key to select demand mode.
 3. Press ENTER key to finish setting and back to menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.10.2 Calculation Period Setting (Period)

- Calculation Demand Period Setting. The selectable range is 1 ~ 60 minutes. The factory value is 15 minutes.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter period setting.
 2. Press UP or DOWN key to select the period.
 3. Press LEFT key and move on to the next digit.
 4. Repeat step 2 to 3 until finishing period 2-digits setting, press ENTER key to save and return to the menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.10.3 Reset

- Reset demand value.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter reset setting.
 2. Use UP and DOWN key to select “YES” for clear or “NO” for leave.
 3. Press ENTER key to finish setting and back to menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.10.4 MAX Reset

- Reset power meter maximum demand record value.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter max reset.
 2. Use UP and DOWN key to select "YES" for clear or "NO" for leave.
 3. Press ENTER key to finish setting and back to menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.11 Restored to Factory State (Initial)

4.1.11.1 Restore Default Setting (Meter Reset)

- Restore the power meter to default factory value. The restored password is 7170.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter restore the factory default setting.
 2. Press UP or DOWN key to select the first number.
 3. Press LEFT key move to next digit.
 4. Repeat step 2 to 3 until finishing 4-digit, press ENTER key confirm back and return to the menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.11.2 MAX/MIN Reset

※DA510 DOES NOT HAVE THIS FUNCTION.

- Clear MAX/MIN records of the meter.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter the clear MAX/MIN records of the meter setting..
 2. Use UP and DOWN key to select "YES" for clear or "NO" for leave.
 3. Press ENTER key to finish setting and back to menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.1.11.3 Clear Auto Wire (Wiring Reset)

※DA510 DOES NOT HAVE THIS FUNCTION.

- Clear auto wire.
- Steps of setup are as follows:
 1. Press ENTER key on the menu page to enter the auto wire reset setting.
 2. Use UP and DOWN key to select "YES" for clear or "NO" for leave.
 3. Press ENTER key to finish setting and back to menu.
- ※ Press LEFT key for 2 seconds to cancel the changes and return to the previous menu.

4.2 Basic Measurements

4.2.1 Harmonic Test

Total Harmonic Distortion (THD) is the detection of the current waveform distortion degree, the ratio of the harmonic content to the fundamental wave. The calculation formula of voltage/THD current is :

Current Total Harmonic Distortion:	$THD_I = \frac{1}{ I_{fund} } \sqrt{\sum_{n=2}^{31} I_{n.Harm} ^2}$
Voltage Total Harmonic Distortion:	$THD_U = \frac{1}{ U_{fund} } \sqrt{\sum_{n=2}^{31} U_{n.Harm} ^2}$

4.2.2 Demand Test

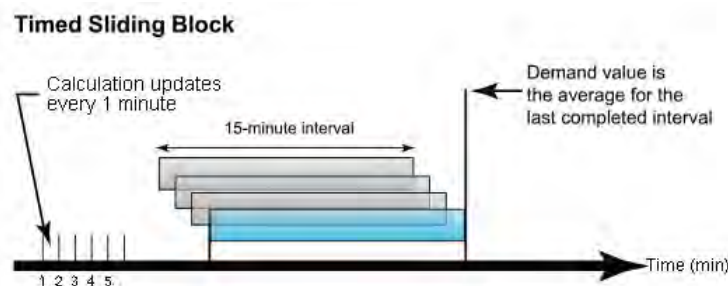
The meter of demand calculation: total active power demand, total reactive power demand, total apparent power demand, phase A current demand, phase B current demand, and phase C current demand.

Demand calculating mode can be set as sliding block and fix block according to user. And fixed block method, the calculation method is as follows:

4

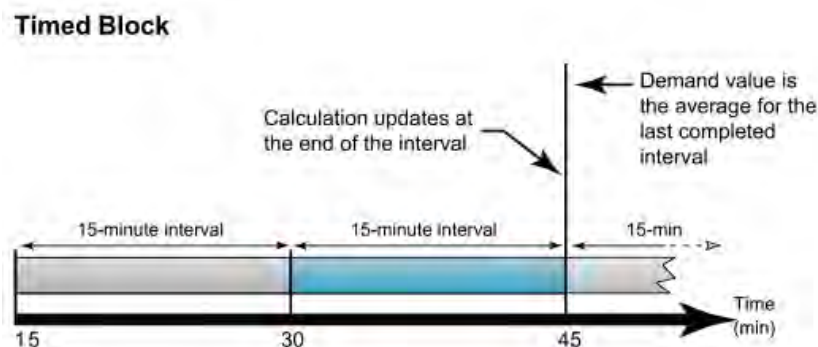
4.2.2.1 Sliding Block

When using the sliding block interval method, user selects an interval from 1 to 60 minutes, which is the period of the calculation. The demand updates every 1 minute as the block slides once. The following figure description takes a 15-minute block interval as an example:



4.2.2.2 Fix Block

Like the sliding block, a calculation period is set first, and the increment is also one minute. However, only one demand is calculated in the whole period, that is the demand update interval is the calculation cycle time. The following figure description takes a 15-minute block interval as an example:



4.3 Alarm Log Function

※DA510 DOES NOT HAVE THIS FUNCTION.

The power meter has the function of alarm logging, when a parameter change causes the defined alarm trigger condition to be established and the duration exceeds the preset time limit, then the alarm recording will be activated. The alarm parameter code, value, alarm status and all alarms are recorded and stored at the time of occurrence, and up to 16 such records can be stored in the memory.

Before using the alarm log function, you need finish the condition setting and enable the log function. Any unfinished or incorrect setting will cause the failure of the final log. The setting operation is finish by setting the corresponding register. Special instructions are required these register settings must be set via the communication system.

4.3.1 Alarm event logging function enable

Alarm function enable: It determines whether the alarm logging function is enabled for this meter. Only when the setting is "1", the logging function can be enabled, and the settings related to the alarm logging can take effect.

Logging enable of each alarm log: It determine whether each group of alarm log settings are active. The data tablet is a 16-bit unsigned integer, its bit 0 ~ bit 15 corresponding to the activation of group 1 to group 16 alarm log settings. When the corresponding bit is set to "1", the alarm setting of this group is active, or it is invalid.

Table 4-1 is the setting content and address of alarm function activation and each group of alarm event recording activation.

(Table 4-1)

MODBUS Address		Item	Range	Data Type	Unit	Byte	Read(R) Write(W)
Hex	Modicom Tablet						
F0	40241	Alarm function enabled	0: OFF 1: ON	word		2	R / W
F1	40242	Logging enable of each alarm log	Bit0: Alarm-1 ~ Bit15: Alarm-16 0: OFF 1: ON	word		2	R / W

4.3.2 Alarm log Parameters

Table 4-2 lists the parameter content and address of the first group of alarm settings. There are 16 groups of such setting records, all in the same tablet.

(Table 4-2)

MODBUS Address		Item	Range	Data Type	Unit	Byte	Read(R) Write(W)
Hex	Modicom Tablet						
Alarm - 1							
1F	40032	Alarm parameters setting	Refer to parameter table 1	word		2	R / W
20	40033	Alarm point setting	Depends on the parameter	Float		4	R / W
21	40034						
22	40035	Alarm trigger condition	0: more than(>) 1: equal(=) 2: less than(<)	word		2	R / W

MODBUS Address		Item	Range	Data Type	Unit	Byte	Read(R) Write(W)
Hex	Modicom Tablet						
23	40036	Alarm trigger delay time	0 ~ 3000	word	0.01s	2	R / W

Parameter selection: Select parameters related to this group of alarm, such as 0: frequency, 12: three-phase current average, etc. (e.g. Table 4-3), then the group alarm will make a conditional judgment on this parameter.

(Table 4-3)

No.	Parameter	No.	Parameter	No.	Parameter	No.	Parameter	No.	Parameter
0	frequency	1	Voltage A-N	2	Voltage B-N	3	Voltage C-N	4	Voltage L-N avg.
5	Voltage A-B	6	Voltage B-C	7	Voltage C-A	8	Voltage L-L avg.	9	Current A
10	Current B	11	Current C	12	Current avg.	13	natural current	14	Active power A
15	Active power B	16	Active power C	17	Active power total	18	Reactive power A	19	Reactive power B
20	Reactive power C	21	Reactive power total	22	Apparent power A	23	Apparent power B	24	Apparent power C
25	Apparent power total	26	Power factor A	27	Power factor B	28	Power factor C	29	Power factor total
30	Present active power demand	31	Present reactive power demand	32	Present apparent power demand	33	Present current demand	34	Voltage unbalance
35	unbalanced current								

Trigger condition and set point: set logging condition, such as more than(>), equal(=), less than(<). For example: if you choose target parameter to be "frequency", condition to be "more than" and set point to be "50", logging will be triggered when the frequency is more than 50Hz.

Delay time: If the logging condition lasts for the preset time period, the event log will be triggered. The delay range is from 0 to 3000 (unit: 10mS). When it is set to 0, there is no delay, event log will be triggered when the log condition is met. If it is set to 20, there will be a 200ms (20 x 10mS) delay.

Correctly complete the above settings, the event recording function can be used normally.

4.3.3 Alarm Log Reading

Event logging has 16 entries can be recorded in total. The record sequence of these entries does not depend on the sequence of the 16 logs. The meter begins logging starting from the 1st record location to the last one. Event logs are being recorded in a "cycle" function which means the latest event will overwrite the oldest record. When over/ under limit parameters return to normal, its value and time stamp will be recorded as well. Therefore, users can determine the over/under limit duration by checking the time difference. See table 4-4.

The following is an example of the first set of alarm records, each in the same tablet.

Alarm Source: Represents the source of the current alarm log. Data tablet is a 16-digits unsigned integer, and its bit 0~bit 15 correspond to the settings of the 1st to 16th groups respectively. Bit=1 means YES, Bit=0 means NO.

Event status: Indicates whether the event is alert or recover, 1 means alert, 0 means recover.

Parameter: Specifies the monitored parameter. Same as Table 4-2.

Value: Shows the recorded value of the selected parameter when an alert is triggered and when it recovers.

Date and Time: Indicates the time stamp of log.

The latest log number: 0~16, indicates which number is the latest record. After power-on the number is 0, and for each incremented record, the number is incremented by 1, and the event log number is cycle record.

(Table 4-4)

MODBUS Address		Item	Range	Data Type	Unit	Byte	Read(R) Write(W)
Hex	Modicom Tableat						
400	41025	Latest alarm log group number	0: No new record 1~16: New record number	word		2	R
Alarm Log-1							
401	41026	Alarm Source	1~16: Alarm-1~ Alarm-16	word		2	R
402	41027	Alarm Status	0: Disable 1: Enable	word		2	R
403	41028	Alarm Parameter	Refer to parameter table one	word		2	R
404	41029	Alarm parameter log value	Depends on parameters	Float		4	R
405	41030						
406	41031	Alarm Date	Y: 00~99 (high byte)	byte	Year Month	2	R
			M: 1~12 (low byte)				
407	41032		D: 1~31				
408	41033	Alarm Time	H: 00~23 (high byte)	byte	Hour Minute	2	R
			M: 00~59 (low byte)				
409	41034		S: 00~59	word	Second	2	R

4.4 Block Transfer Function

This function is mainly to allow the user to gather the parameter values to be read together to facilitate one-time reading.

Fill in the address of the parameter to be read into 0x50C~0x51F in sequence, and then read the value of the corresponding parameter from the address of 0x600~0x613.

The address range that can be set is 0x100 ~ 0x1F8.

For example:

When 0x50C is written to 0x100 (high byte address of phase A voltage), 0x50D is written to 0x101 (low byte address of phase A voltage), the value obtained by reading 0x600 and 0x601 is the phase A voltage value, and so on.

4.5 Data Log Function

In order to facilitate users to understand the history of the meter, the meter provides data logging function. Record a set of data at regular intervals. Meter internal 4MB of data storage space for recording data. The meter has a real-time clock and each data log has a time stamp.

4.5.1 Data logging function setting

The data recording function can set the parameters to be logged according to the need, up to 50 parameters can be set. There are 89 kinds of recordable parameters, such as Table 4-5.

Table 4-5

No.	Parameter	No.	Parameter	No.	Parameter	No.	Parameter	No.	Parameter
0	NONE	1	FREQ	2	Voltage A-N	3	Voltage B-N	4	Voltage C-N
5	Voltage L-N avg.	6	Voltage A-B	7	Voltage B-C	8	Voltage C-A	9	Voltage L-L avg.
10	Current A	11	Current B	12	Current C	13	Current avg.	14	natural current
15	Active power A	16	Active power B	17	Active power C	18	Active power total	19	Reactive power A
20	Reactive power B	21	Reactive power C	22	Reactive power total	23	Apparent power A	24	Apparent power B
25	Apparent power C	26	Apparent power total	27	Power factor A	28	Power factor B	29	Power factor C
30	Power factor total	31	Voltage unbalance L-L avg.	32	Current unbalance	33	Load characteristic	34	Present active power demand
35	Present reactive power demand	36	Present apparent power demand	37	Current A demand	38	Current B demand	39	Current C demand
40	Present current demand	41	Active energy delivered	42	Active energy received	43	Reactive energy delivered	44	Reactive energy received
45	Apparent energy delivered	46	THD voltage A-N	47	THD voltage B-N	48	THD voltage C-N	49	THD voltage
50	THD current A	51	THD current B	52	THD current C	53	THD current	54	Phasor diagram voltage B lag voltage A
55	Phasor diagram voltage C lag voltage A	56	Phasor diagram current A lag voltage A	57	Phasor diagram current B lag voltage A	58	Phasor diagram current C lag voltage A	59	Phasor diagram voltage BC lag voltage AB
60	Phasor diagram voltage CA lag voltage AB	61	Phasor diagram current A lag voltage AB	62	Phasor diagram current B lag voltage AB	63	Phasor diagram current C lag voltage AB	64	Maximum THD Voltage A
65	Minimum THD Voltage A	66	Maximum THD Voltage B	67	Minimum THD Voltage B	68	Maximum THD Voltage C	69	Minimum THD Voltage C
70	Maximum THD Voltage	71	Minimum THD Voltage	72	Maximum THD Current A	73	Minimum THD Current A	74	Maximum THD Current B

75	Minimum THD Current B	76	Maximum THD Current C	77	Minimum THD Current C	78	Maximum THD Current	79	Minimum THD Current
80	Present Maximum active power demand	81	Present Minimum active power demand	82	Present Maximum reactive power demand	83	Present Minimum reactive power demand	84	Present Maximum apparent power demand
85	Present Minimum apparent power demand	86	Maximum current A demand	87	Maximum current B demand	88	Maximum current C demand	89	Maximum current demand

The time parameters required for the data logging function are as Table 4-6.

Table 4-6

MODBUS Address		Item	Range	Data Type	Unit	Byte	Read(R) Write(W)
Hex	Modicom Tableat						
804	42053	Recording Interval of the time value	1~32767	word		2	R / W
805	42054	Recording Interval of the time unit	0: Second 1: Minute 2: Hour 3: Day	word		2	R / W
806	42055	Start recording time: Year \ Month	Year: 00~99 (high byte) Month: 1~12 (low byte)	byte	Year \ Month	2	R / W
807	42056	Start recording time: Day	Day: 1~31	word	Day	2	R / W
808	42057	Start recording time: Hour \ Minute	Hour: 00~23 (high byte) Minute: 00~59 (low byte)	byte	Hour \ Minute	2	R / W
809	42058	Start recording time: Second	Second: 00~59	word	Second	2	R / W
80A	42059	Stop recording time: Year \ Month	Year: 00~99 (high byte) Month: 1~12 (low byte)	byte	Year \ Month	2	R / W
80B	42060	Stop recording time: Day	Day: 1~31	word	Day	2	R / W
80C	42061	Stop recording time: Hour \ Minute	Hour: 00~23 (high byte) Minute: 00~59 (low byte)	byte	Hour \ Minute	2	R / W
80D	42062	Stop recording time: Second	Second: 00~59	word	Second	2	R / W
80E	42063	Disable/Enable log	0: Disable 1: Enable	word		2	R / W
80F	42064	Record field 01 parameter selection	Refer to parameter table two	word		2	R / W
810	42065	Record field 02 parameter selection	Refer to parameter table two	word		2	R / W
⋮	⋮	⋮					
83F	42112	Record field 49 parameter selection	Refer to parameter table two	word		2	R / W
840	42113	Record field 50 parameter selection	Refer to parameter table two	word		2	R / W

Recording interval duration time: Can set any integer between 1 ~ 32767. Unit with the interval time, that is each data record interval time.

Record interval duration time unit: Can set the second, minute, hour, day.

Record period: Enable the data logging function to set the start time and end time. The time setting range is year, month, day, hour, minute and second. When enabled, a data log is recorded for each record interval duration time between the start time and the end time.

Note: Condition setting, recording function enable, etc. must be done before using the data logging function. Any incomplete or incorrect settings will result in the recorded failure. The setting operation is completed by setting the corresponding register. It should be specially explained that the settings of these registers must be set by means of communication. After the record full, data will be based on first-in-first-out principle of circular coverage. When cyclic overwriting occurs, the earliest recorded data will be overwritten sequentially. Therefore, user are advised to read and save the entire data record before it is full to prevent data loss.

When the contents of the record parameters have changed, then all the records will not be retained and start recording from beginning.

4.5.2 Data Log Read

Read data logs must be read via communication, see Table 4-7.

Table 4-7

MODBUS Address		Item	Range	Data Type	Unit	Byte	Read(R) Write(W)
Hex	Modicom Tableat						
800	42049	WORD count of each recording	0~999	word		2	R
801	42050	Number of unread data	0~65535	word		2	R
802	42051	Read record	If there is no data after reading, return status code 0x20	word		2	R
803	42052	Status reply after read	0: Clear logging data (Index reset) 1: Abort this time read (Index will not any shift) 2: Read success	word		2	W

The length of each data record can be obtained by reading the length address (0x800) of each record. The data length obtained is read through the data reading address (0x802), as shown in the figure below:

Address	Code	Starting Reg		Byte count		CRC	
		Hi	Lo	Hi	Lo	Lo	Hi
01h	03h	08h	00h	xxh	xxh	xxh	xxh

Byte count: Read from 0x800

The data content will be returned in the following tableat:

Address	Code	Byte count	Year/Month		Day		Hour/Minute		Second		Values	CRC	
			Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo		Lo	Hi
01h	03h	xxh	14h	07h	00h	1Fh	0Ah	1Eh	00h	3Bh	xxh	xxh

Date : 2020/7/31 (14h=20 07h=7 001Fh=31)

Time : 10:30:59 (0Ah=10 1E=30 003Bh=59)

Only one record can be read per send-off read command. Read the number of unread pens (0x801) to know how many data records are still unread. If there are no unread records, the data record backhaul content will be 0020h, indicating that the data record has been read.

Each time a record is read, a return read status (0x803) is required to the meter as a basis for recording pointer movement. You can also discard the reading of this record or clear the data record by reading the status report.

4.6 Time-of-use (TOU)

User can assign up to 4 different tariffs (sharp, peak, valley and normal) to different time period within a day according to the billing requirements. The meter will calculate and accumulate energy to different tariffs according to the meter's internal clock timing and TOU settings.

TOU setting: User can set a maximum of 4 TOU seasons, each season can be assigned to a TOU schedule, maximum of 8 TOU schedules are available. Each schedule can be divided up into 8 segments, each segment can have its own tariff (sharp, peak, valley and normal).

User can customize the TOU calendar (including its tariffs, seasons, schedules and segments) according to different applications. To make sure that the TOU calendar is setup correctly, the meter will check the TOU settings according to the predefined rules.

TOU function will be disabled if the TOU calendar is set up incorrectly. If no errors are found in the calendar and the TOU function is enabled, TOU energy accumulation will begin.

4.6.1 Season Setting

The calendar year will be divided up into different seasons depending on the season setting parameter. The parameter can be selected from any integer between 1 to 4. User must enter the correct value for the season setting parameter in accordance to the TOU season table. If the season setting parameter is set as 2, the first 2 slots of the TOU season table must be set, otherwise it will be considered as an invalid input, TOU function will be disabled.

4.6.2 Tou Season Format

Enter the start date into the TOU season table slot following this format "MM-DD ID", MM stands for the month, DD stands for the day and ID stands for the TOU schedule ID, available from 1 to 8. The dates should be organized so that they are in sequence according to the calendar year, the earlier date comes first and the later date comes last.

For example, if 3 seasons are selected, the date parameters are January 1, June 6 and September 7, and TOU schedule 02, 01, 03 will be used respectively, the first TOU season table slot shall enter 01-01 02, the second slot shall enter 06-06 01, and the third slot shall enter 09-07 03. Entering 01-01 02 for the first slot, 09-07 03 for the second slot and 06-06 01 for the third slot is considered invalid.

4.6.3 Schedule Setting

The number of available TOU schedules depends on the schedule setting parameter. The parameter can be selected from any integer between 1 to 8. This parameter determines the number of TOU schedules available for the TOU calendar setting. A maximum of 8 TOU Schedules, from TOU Schedule #1 to TOU Schedule #8 can be used.

4.6.4 Segment Setting

Each TOU schedule consists of various timing segments. The number of segments depends on the segment setting parameter setup. The parameter can be selected from any integer between 1 to 8. User must enter the correct value for the segment setting parameter in accordance to the TOU schedule table. If the segment setting parameter is set as 3, the first 3 slots of the TOU schedule table must be set, otherwise, it will be considered as an invalid input, TOU function will be disabled.

Each TOU schedule represents a 24 hour cycle. Similar to TOU season format, enter the start time into the TOU schedule table slot following this format "HH:MM ID", HH stands for hour (in 24 hr format), MM stands for minutes and ID stands for tariffs (available from 00 to 03). The time should be organized according to the hour sequence. Entering time information in a wrong sequence (for example, entering 15:30, 01:00, 22:45) is considered as an invalid operation, TOU function will be disabled.

4.6.5 Tariff Setting

This parameter corresponds to the number of tariffs available for the TOU calendar and can be selected from any integer from 0 to 3. The four tariffs: sharp, peak, valley and normal are represented by 4 integers: 0,1,2 and 3 respectively.

4.6.6 Holiday Setting

This parameter can be set from any integer between 0 and 20, meaning a maximum of 20 holidays can be programmed to the TOU calendar. If the holiday setting parameter is set as 3, the first 3 slots of the holiday schedule must be set, otherwise it will be considered as an invalid input, TOU function will be disabled.

Note: User can reset the TOU calendar to default value via communication.

4.6.7 TOU Holiday schedule

The holiday schedule uses the same format as the TOU seasons “MM-DD ID”. User can select which TOU schedule to be used for the holiday. The dates of the holiday schedule do not need to be organized in a sequential order (i.e. the first slot can be January 1, the second slot can be December 26 and the third slot can be December 25).

Holiday day can be set to use the same holiday day setting for the next 5 years, or 5 years holiday day can be setting separately. When multi-year holiday function is enabled, if the current year of the meter falls into the multi-year holiday setting, it automatically loads the multi-year holiday settings into the current TOU settings. If the current year of the meter does not fall into the multi-year holiday setting, it remains the current TOU settings

Note: Holiday schedule has the highest priority among all the schedules

4.6.8 Weekend schedule

Weekend setting: Definition of weekend is fixed as Saturday and Sunday. When the meter clock is within the Weekend Schedule, the energy will accumulate under the tariff that corresponds to the Schedule.

Note: Weekend schedule's priority is followed by Holiday schedule. When Holiday schedule is not enabled, Weekend schedule has the highest priority, overriding the normal (weekday) schedule.

4.6.9 Demand Function

TOU can record maximum power and current demand under different tariffs, as well as the time stamp of the maximum value. It can also clear by setting the corresponding register or from the meter front.

4.6.10 TOU Separate Log

TOU has 2 separate logs:

current month TOU and last month TOU. When setup appropriately and when TOU is enabled, energy will be accumulated in a month-to-month basis. The current energy usage will be stored under current Month TOU and is divided up into different tariffs. When next month or counting period starts, all current month TOU values will be moved to last month TOU.

There are two ways of automatic settle of current month TOU:

1. End of Month: This is the default method. All values from current month TOU will be copied over to last month TOU at the every beginning of each month (the first day of each month at time 00: 00: 00). Current month TOU will be cleared and reset to 0.
2. Fixed day: User can select when the values from current month TOU would be copied over to last month TOU. User can set the time in the following format “DD HH: MM: SS”, DD stands for day, HH stands for hour, MM stands for minute, SS stands for second.

Similar to the previous method, once current month TOU is transferred to last month TOU, all values from current month TOU will be cleared and reset to 0.

MEMO

Chapter 5 Parameters and Functions

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5.1 Overview of Parameters5-2

5.1 Overview of Parameters

■ DA530 ▲ DA510

MODBUS Address		Item	Range	Data Type	Unit	Data Size(BYTE)	Read(R)/Write(W)	Model	
Hex	Modicom Format								
0. System Parameters:0x01 ~ 0xF1									
1	40002	Present date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R / W	■	▲
2	40003		Day:1~31 Week:SUN~SAT	byte	Day · Week	2	R / W	■	▲
3	40004	Present time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R / W	■	▲
4	40005		Second:00~59	word	Second	2	R / W	■	▲
6	40007	Meter Model	13:DPM-DA530 14:DPM-DA510	word		2	R	■	▲
7	40008	Total time on power	0~59999999	word	Minute	4	R	■	▲
8	40009								
D	40014	Power system configuration	0: 1P2W 1: 1P3W 2: 3P3W1CT 3: 3P3W2CT 4: 3P3W3CT 5: 3P4W1CT 6: 3P4W3CT	word		2	R / W	■	▲
E	40015	Primary CT(A)	1 ~ 9999	uint	A	2	R / W	■	▲
F	40016	Secondary CT(A)	0:5A 1:1A	word	A	2	R / W	■	▲
10	40017	Primary PT	100 ~ 1200000	uint	V	4	R / W	■	▲
11	40018								
12	40019	Primary PT	50~500	uint	V	2	R / W	■	▲
14	40021	Backlight delay	0~15 0: Never	word	Minute	2	R / W	■	▲
16	40023	Baud rate	0: 1200 1: 2400 2: 4800 3: 9600 4: 19200 5: 38400 6: 57600 7: 115200	word	bps	2	R / W	■	▲
19	40026	Parity bit	0: N.8.1 1: N.8.2 2: O.8.1 3: E.8.1	word		2	R / W	■	▲
1B	40028	Modbus address	1 ~ 247	word		2	R / W	■	▲

MODBUS Address		Item	Range	Data Type	Unit	Data Size(BYTE)	Read(R)/Write(W)	Model	
Hex	Modicom Format							■	▲
1C	40029	Meter reset	2:reset value of energy \ CO2 emission 3:demand reset 4:reset alarm logs and times 5:MAX/MIN reset 10:reset ope-hour 11:reset run-hour 12:MAX demand reset	word		2	W	■	▲
1D	40030	Demand Mode	0:Sliding 1:block	word		2	R / W	■	
1E	40031	Demand Period Time(min)	1 ~ 60	word	Minute	2	R / W	■	

parameter table 1									
No.	Parameter	No.	Parameter	No.	Parameter	No.	Parameter	No.	Parameter
0	FREQ	1	U1	2	U2	3	U3	4	ULL. AVG
5	U12	6	U23	7	U31	8	ULL. AVG	9	I1
10	I2	11	I3	12	I.AVG	13	IN	14	P-1
15	P-2	16	P-3	17	P.SUM	18	Q-1	19	Q-2
20	Q-3	21	Q.SUM	22	S-1	23	S-2	24	S-3
25	P.SUM	26	PF1	27	PF2	28	PF3	29	PF SUM
30	P.DM	31	Q.DM	32	S.DM	33	I DM	34	Uunbl
35	Iunbl								

Alarm - 1

1F	40032	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
20	40033	Set point of alarm	Depend on parameter	Float		4	R / W	■	
21	40034								
22	40035	Trigger condition	0:more than(> 1:equal(= 2:less than(<	word		2	R / W	■	
23	40036	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	

Alarm - 2

26	40039	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
27	40040	Set point of alarm	Depend on parameter	Float		4	R / W	■	
28	40041								
29	40042	Trigger condition	0:more than(> 1:equal(= 2:less than(<	word		2	R / W	■	
2A	40043	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	

Alarm - 3									
2D	40046	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
2E	40047	Set point of alarm	Depend on parameter	Float		4	R / W	■	
2F	40048							■	
30	40049	Trigger condition	0:more than(> 1:equal(= 2:less than(<)	word		2	R / W	■	
31	40050	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	
Alarm - 4									
34	40053	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
35	40054	Set point of alarm	Depend on parameter	Float		4	R / W	■	
36	40055							■	
37	40056	Trigger condition	0:more than(> 1:equal(= 2:less than(<)	word		2	R / W	■	
38	40057	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	
Alarm - 5									
3B	40060	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
3C	40061	Set point of alarm	Depend on parameter	Float		4	R / W	■	
3D	40062							■	
3E	40063	Trigger condition	0:more than(> 1:equal(= 2:less than(<)	word		2	R / W	■	
3F	40064	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	
Alarm - 6									
42	40067	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
43	40068	Set point of alarm	Depend on parameter	Float		4	R / W	■	
44	40069							■	
45	40070	Trigger condition	0:more than(> 1:equal(= 2:less than(<)	word		2	R / W	■	
46	40071	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	
Alarm - 7									
49	40074	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	

4A	40075	Set point of alarm	Depend on parameter	Float		4	R / W	■	
4B	40076							■	
4C	40077	Trigger condition	0:more than(> 1:equal(= 2:less than(<	word		2	R / W	■	
4D	40078	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	
Alarm - 8									
50	40081	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
51	40082	Set point of alarm	Depend on parameter	Float		4	R / W	■	
52	40083							■	
53	40084	Trigger condition	0:more than(> 1:equal(= 2:less than(<	word		2	R / W	■	
54	40085	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	
Alarm - 9									
57	40088	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
58	40089	Set point of alarm	Depend on parameter	Float		4	R / W	■	
59	40090							■	
5A	40091	Trigger condition	0:more than(> 1:equal(= 2:less than(<	word		2	R / W	■	
5B	40092	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	
Alarm - 10									
5E	40095	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
5F	40096	Set point of alarm	Depend on parameter	Float		4	R / W	■	
60	40097							■	
61	40098	Trigger condition	0:more than(> 1:equal(= 2:less than(<	word		2	R / W	■	
62	40099	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	
Alarm - 11									
65	40102	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
66	40103	Set point of alarm	Depend on parameter	Float		4	R / W	■	
67	40104							■	
68	40105	Trigger condition	0:more than(> 1:equal(= 2:less than(<	word		2	R / W	■	

69	40106	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	
Alarm - 12									
6C	40109	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
6D	40110	Set point of alarm	Depend on parameter	Float		4	R / W	■	
6E	40111							■	
6F	40112	Trigger condition	0:more than(>) 1:equal(=) 2:less than(<)	word		2	R / W	■	
70	40113	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	
Alarm - 13									
73	40116	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
74	40117	Set point of alarm	Depend on parameter	Float		4	R / W	■	
75	40118							■	
76	40119	Trigger condition	0:more than(>) 1:equal(=) 2:less than(<)	word		2	R / W	■	
77	40120	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	
Alarm - 14									
7A	40123	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
7B	40124	Set point of alarm	Depend on parameter	Float		4	R / W	■	
7C	40125							■	
7D	40126	Trigger condition	0:more than(>) 1:equal(=) 2:less than(<)	word		2	R / W	■	
7E	40127	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	
Alarm - 15									
81	40130	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
82	40131	Set point of alarm	Depend on parameter	Float		4	R / W	■	
83	40132							■	
84	40133	Trigger condition	0:more than(>) 1:equal(=) 2:less than(<)	word		2	R / W	■	
85	40134	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	
Alarm - 16									
88	40137	Parameter select of alarm	Depend parameter table 1	word		2	R / W	■	
89	40138	Set point of alarm	Depend on parameter	Float		4	R / W	■	

8A	40139							■	
8B	40140	Trigger condition	0:more than(> 1:equal(= 2:less than(<	word		2	R / W	■	
8C	40141	Trigger delay time	0 ~ 3000	word	0.01s	2	R / W	■	
System Parameters									
E4	40229	Password settintg	0000~9999	word		2	R / W	■	▲
E5	40230	Default page	0:SUMMARY-1 1:SUMMARY-2 2:SUMMARY-3 3:SUMMARY-4	word		2	R / W	■	▲
E6	40231	Data byte sequence setting	Bit 0:Float Bit 1:word 0: HIGH byte first 1: LOW byte first	word		2	R / W	■	▲
E7	40232	Parameter assign of PO1	0: OFF 1: Active energy delivered 2: Active energy received 3: Reactive energy delivered 4: Reactive energy received	word		2	R / W	■	▲
E8	40233	Divider of PO1	1~9999	word		2	R / W	■	▲
E9	40234	Pulse width of PO1	0~5000 0 為 50% duty cycle	word	mS	2	R / W	■	▲
EA	40235	CO ₂ ratio per kWh	00.000~60.000	word	Kg	2	R / W	■	
EB	40236	Energy unit	0: 0.0001kWh 1: 0.001kWh 2: 0.01kWh 3: 0.1kWh 4: 1kWh 5: 0.01MWh 6: 0.1MWh	word		2	R / W	■	▲
EC	40237	System initialize	0000~9999	word		2	W	■	▲
ED	40238	Running time	0~59999999	UINT	Minute	4	R	■	▲
EE	40239							■	▲
F0	40241	Alarm function enable	0:OFF 1:ON	word		2	R / W	■	
F1	40242	Event logging function enable	Bit0:Alarm-1 ~ Bit15:Alarm-16 0:OFF 1:ON	word		2	R / W	■	
1. Meter Parameters:0100 ~ 01F7									
100	40257	Voltage A-N	0.0 ~ 1200000.0	Float	V	4	R	■	▲

101	40258								
102	40259	Voltage B-N	0.0 ~ 1200000.0	Float	V	4	R	■	▲
103	40260								
104	40261	Voltage C-N	0.0 ~ 1200000.0	Float	V	4	R	■	▲
105	40262								
106	40263	Voltage L-N avg.	0.0 ~ 1200000.0	Float	V	4	R	■	▲
107	40264								
108	40265	Voltage A-B	0.0 ~ 1200000.0	Float	V	4	R	■	▲
109	40266								
10A	40267	Voltage B-C	0.0 ~ 1200000.0	Float	V	4	R	■	▲
10B	40268								
10C	40269	Voltage C-A	0.0 ~ 1200000.0	Float	V	4	R	■	▲
10D	40270								
10E	40271	Voltage L-L avg.	0.0 ~ 1200000.0	Float	V	4	R	■	▲
10F	40272								

11E	40287	Voltage unbalance L-L avg.	0.0~300.0	Float	%	4	R	■	▲
11F	40288								
120	40289	Current A	0.000~9999.000	Float	A	4	R	■	▲
121	40290								
122	40291	Current B	0.000~9999.000	Float	A	4	R	■	▲
123	40292								
124	40293	Current C	0.000~9999.000	Float	A	4	R	■	▲
125	40294								
126	40295	Current avg.	0.000~9999.000	Float	A	4	R	■	▲
127	40296								
128	40297	Neutral Current	0.000~9999.000	Float	A	4	R	■	▲
129	40298								
130	40305	Current unbalance	0.0~300.0	Float	%	4	R	■	▲
131	40306								
132	40307	Power factor total	-1.000 ~ 1.000 (+:Lag \ -:Advancing)	Float		4	R	■	▲
133	40308								
134	40309	Power factor A	-1.000 ~ 1.000 (+:Lag \ -:Advancing)	Float		4	R	■	▲
135	40310								
136	40311	Power factor B	-1.000 ~ 1.000 (+:Lag \ -:Advancing)	Float		4	R	■	▲
137	40312								
138	40313	Power factor C	-1.000 ~ 1.000 (+:Lag \ -:Advancing)	Float		4	R	■	▲
139	40314								
142	40323	Frequency	45.00~65.00	Float	Hz	4	R	■	▲
143	40324								
144	40325	Active power total	-999,999,999~999,999,999	Float	W	4	R	■	▲
145	40326								
146	40327	Active power A	-999,999,999~999,999,999	Float	W	4	R	■	▲
147	40328								
148	40329	Active power B	-999,999,999~999,999,999	Float	W	4	R	■	▲

149	40330		999						
14A	40331	Active power C	-999,999,999~999,999,999	Float	VAR	4	R	■	▲
14B	40332								
14C	40333	Reactive power total	-999,999,999~999,999,999	Float	VAR	4	R	■	▲
14D	40334								
14E	40335	Reactive power A	-999,999,999~999,999,999	Float	VAR	4	R	■	▲
14F	40336								
150	40337	Reactive power B	-999,999,999~999,999,999	Float	VAR	4	R	■	▲
151	40338								
152	40339	Reactive power C	-999,999,999~999,999,999	Float	VAR	4	R	■	▲
153	40340								
154	40341	Apparent power	0~999,999,999	Float	VA	4	R	■	▲
155	40342								
156	40343	Apparent power A	0~999,999,999	Float	VA	4	R	■	▲
157	40344								
158	40345	Apparent power B	0~999,999,999	Float	VA	4	R	■	▲
159	40346								
15A	40347	Apparent power C	0~999,999,999	Float	VA	4	R	■	▲
15B	40348								
15C	40349	Active energy delivered	0.0~9999999.9	Float	kWh	4	R	■	▲
15D	40350								
15E	40351	Active energy received	0.0~9999999.9	Float	kWh	4	R	■	▲
15F	40352								
160	40353	Reactive energy delivered	0.0~9999999.9	Float	kVARh	4	R	■	▲
161	40354								
162	40355	Reactive energy received	0.0~9999999.9	Float	kVARh	4	R	■	▲
163	40356								
164	40357	Apparent energy delivered	0.0~9999999.9	Float	kVAh	4	R	■	▲
165	40358								
168	40361	Active energy delivered + Active energy received	0.0~9999999.9	Float	kWh	4	R	■	▲
169	40362								
16A	40363	Active energy delivered - Active energy received	-999999.9~9999999.9	Float	kWh	4	R	■	▲

16B	40364								
16C	40365	Reactive energy delivered + Reactive energy received	0.0~9999999.9	Float	kVARh	4	R	■	▲
16D	40366								
16E	40367	Reactive energy delivered - Reactive energy received	-999999.9~9999999.9	Float	kVARh	4	R	■	▲
16F	40368								
174	40373	THD current A	0.0~100.0	Float	%	4	R	■	
175	40374								
176	40375	THD current B	0.0~100.0	Float	%	4	R	■	
177	40376								
178	40377	THD current C	0.0~100.0	Float	%	4	R	■	
179	40378								
17C	40381	THD voltage A-N	0.0~100.0	Float	%	4	R	■	
17D	40382								
17E	40383	THD voltage B-N	0.0~100.0	Float	%	4	R	■	
17F	40384								
180	40385	THD voltage C-N	0.0~100.0	Float	%	4	R	■	
181	40386								
188	40393	THD current total	0.0~100.0	Float	%	4	R	■	
189	40394								
18A	40395	THD voltage total	0.0~100.0	Float	%	4	R	■	
18B	40396								
18C	40397	Current demand	0.000~9999.000	Float	A	4	R	■	
18D	40398								
198	40409	Active power demand	-999,999,999~999,999,999	Float	W	4	R	■	
199	40410								
1A4	40421	Reactive power demand	-999,999,999~999,999,999	Float	VAR	4	R	■	
1A5	40422								
1B0	40433	Apparent power demand	0~999,999,999	Float	VA	4	R	■	
1B1	40434								
1E8	40489	Load Type	82: R 76: L 67: C	word		2	R	■	▲
1E9	40490	Current A demand	0.000~9999.000	Float	A	4	R	■	

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1EA	40491								
1EB	40492	Current B demand	0.000~9999.000	Float	A	4	R	■	
1EC	40493								
1ED	40494	Current C demand	0.000~9999.000	Float	A	4	R	■	
1EE	40495								
1F7	40504	CO ₂ emission	0.000~99999.999	Float	Kg	4	R	■	
1F8	40505								
2. Maximum:0200 ~ 02FB									
200	40513	Max voltage A-B	0.0 ~ 1200000.0	Float	V	4	R	■	
201	40514								
202	40515	Date of max voltage A-B	Year:00~99 (high byte)	byte	Year-Month	2	R	■	
203	40516		Month:1~12 (low byte)	Day:1~31	word	Day	2	R	■
204	40517	Time of max voltage A-B	Hour:00~23 (high byte)	byte	Hour-Minute	2	R	■	
205	40518		Minute:00~59 (low byte)	Second:00~59	word	Second	2	R	■
206	40519	Max voltage B-C	0.0 ~ 1200000.0	Float	V	4	R	■	
207	40520								
208	40521	Date of max voltage B-C	Year:00~99 (high byte)	byte	Year-Month	2	R	■	
209	40522		Month:1~12 (low byte)	Day:1~31	word	Day	2	R	■
20A	40523	Time of max voltage B-C	Hour:00~23 (high byte)	byte	Hour-Minute	2	R	■	
20B	40524		Minute:00~59 (low byte)	Second:00~59	word	Second	2	R	■
20C	40525	Max voltage C-A	0.0 ~ 1200000.0	Float	V	4	R	■	
20D	40526								
20E	40527	Date of max voltage C-A	Year:00~99 (high byte)	byte	Year-Month	2	R	■	
20F	40528		Month:1~12 (low byte)	Day:1~31	word	Day	2	R	■
210	40529	Time of max voltage C-A	Hour:00~23 (high byte)	byte	Hour-Minute	2	R	■	
211	40530		Minute:00~59 (low byte)	Second:00~59	word	Second	2	R	■
212	40531	Max voltage A-N	0.0 ~ 1200000.0	Float	V	4	R	■	
213	40532								
214	40533	Date of max voltage A-N	Year:00~99 (high byte)	byte	Year-Month	2	R	■	
215	40534		Month:1~12 (low byte)	Day:1~31	word	Day	2	R	■
216	40535	Time of max voltage A-N	Hour:00~23 (high byte)	byte	Hour-Minute	2	R	■	
217	40536		Minute:00~59 (low byte)	Second:00~59	word	Second	2	R	■

218	40537	Max voltage B-N	0.0 ~ 1200000.0	Float	V	4	R	■	
219	40538								
21A	40539	Date of max voltage B-N	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
21B	40540		Day:1~31	word	Day	2	R	■	
21C	40541	Time of max voltage B-N	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
21D	40542		Second:00~59	word	Second	2	R	■	
21E	40543	Max voltage C-N	0.0 ~ 1200000.0	Float	V	4	R	■	
21F	40544								
220	40545	Date of max voltage C-N	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
221	40546		Day:1~31	word	Day	2	R	■	
222	40547	Time of max voltage C-N	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
223	40548		Second:00~59	word	Second	2	R	■	
224	40549	Max current A	0.000~9999.000	Float	A	4	R	■	
225	40550								
226	40551	Date of max current A	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
227	40552		Day:1~31	word	Day	2	R	■	
228	40553	Time of max current A	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
229	40554		Second:00~59	word	Second	2	R	■	
22A	40555	Max current B	0.000~9999.000	Float	A	4	R	■	
22B	40556								
22C	40557	Date of max current B	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
22D	40558		Day:1~31	word	Day	2	R	■	
22E	40559	Time of max current B	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
22F	40560		Second:00~59	word	Second	2	R	■	
230	40561	Max current C	0.000~9999.000	Float	A	4	R	■	
231	40562								
232	40563	Date of max current C	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
233	40564		Day:1~31	word	Day	2	R	■	
234	40565	Time of max current C	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
235	40566		Second:00~59	word	Second	2	R	■	
23C	40573	Max frequency	45.00~65.00	Float	Hz	4	R	■	

23D	40574								
23E	40575	Date of max frequency	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
23F	40576		Day:1~31	word	Day	2	R	■	
240	40577	Time of max frequency	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
241	40578		Second:00~59	word	Second	2	R	■	
242	40579	Max power factor total	-1.000 ~ 1.000 (+:Lag ` -:Advancing)	Float		4	R	■	
243	40580								
244	40581	Date of max power factor total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
245	40582		Day:1~31	word	Day	2	R	■	
246	40583	Time of max power factor total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
247	40584		Second:00~59	word	Second	2	R	■	
248	40585	Max active power total	-999,999,999~999,999,999	Float	W	4	R	■	
249	40586								
24A	40587	Date of max active power total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
24B	40588		Day:1~31	word	Day	2	R	■	
24C	40589	Time of max active power total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
24D	40590		Second:00~59	word	Second	2	R	■	
24E	40591	Max reactive power total	-999,999,999~999,999,999	Float	VAR	4	R	■	
24F	40592								
250	40593	Date of max reactive power total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
251	40594		Day:1~31	word	Day	2	R	■	
252	40595	Time of max reactive power total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
253	40596		Second:00~59	word	Second	2	R	■	
254	40597	Max apparent power total	0~999,999,999	Float	VA	4	R	■	
255	40598								
256	40599	Date of max apparent power total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
257	40600		Day:1~31	word	Day	2	R	■	
258	40601	Time of max apparent power total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
259	40602		Second:00~59	word	Second	2	R	■	
26C	40621	Max THD voltage A-N	0.0~100.0	Float	%	4	R	■	
26D	40622								
26E	40623	Date of max THD voltage A	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	

26F	40624		Day:1~31	word	Day	2	R	■	
270	40625	Time of max THD voltage A	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
271	40626		Second:00~59	word	Second	2	R	■	
272	40627	Max THD voltage B-N	0.0~100.0	Float	%	4	R	■	
273	40628								
274	40629	Date of max THD voltage B	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
275	40630		Day:1~31	word	Day	2	R	■	
276	40631	Time of max THD voltage B	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
277	40632		Second:00~59	word	Second	2	R	■	
278	40633	Max THD voltage C-N	0.0~100.0	Float	%	4	R	■	
279	40634								
27A	40635	Date of max THD voltage C	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
27B	40636		Day:1~31	word	Day	2	R	■	
27C	40637	Time of max THD voltage C	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
27D	40638		Second:00~59	word	Second	2	R	■	
284	40645	Max THD voltage	0.0~100.0	Float	%	4	R	■	
285	40646								
286	40647	Date of max THD voltage	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
287	40648		Day:1~31	word	Day	2	R	■	
288	40649	Time of max THD voltage	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
289	40650		Second:00~59	word	Second	2	R	■	
28A	40651	Max THD current A	0.0~100.0	Float	%	4	R	■	
28B	40652								

28C	40653	Date of max THD current A	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
28D	40654		Day:1~31	word	Day	2	R	■	
28E	40655	Time of max THD current A	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
28F	40656		Second:00~59	word	Second	2	R	■	
290	40657	Max THD current B	0.0~100.0	Float	%	4	R	■	
291	40658								
292	40659	Date of max THD current B	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
293	40660		Day:1~31	word	Day	2	R	■	
294	40661	Time of max THD current B	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
295	40662		Second:00~59	word	Second	2	R	■	
296	40663	Max THD current C	0.0~100.0	Float	%	4	R	■	
297	40664								
298	40665	Date of max THD current C total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
299	40666		Day:1~31	word	Day	2	R	■	
29A	40667	Time of max THD current C total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
29B	40668		Second:00~59	word	Second	2	R	■	
29C	40669	Max THD current	0.0~100.0	Float	%	4	R	■	
29D	40670								
29E	40671	Date of max THD current	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
29F	40672		Day:1~31	word	Day	2	R	■	
2A0	40673	Time of max THD current	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
2A1	40674		Second:00~59	word	Second	2	R	■	
2EA	40747	Max voltage L-N average	0.0 ~ 1200000.0	Float	V	4	R	■	
2EB	40748								

2EC	40749	Date of max voltage L-N average	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
2ED	40750		Day:1~31	word	Day	2	R	■	
2EE	40751	Time of max voltage L-N average	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
2EF	40752		Second:00~59	word	Second	2	R	■	
2F0	40753	Max voltage L-L average	0.0 ~ 1200000.0	Float	V	4	R	■	
2F1	40754								
2F2	40755	Date of max voltage L-L average	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
2F3	40756		Day:1~31	word	Day	2	R	■	
2F4	40757	Time of max voltage L-L average	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
2F5	40758		Second:00~59	word	Second	2	R	■	
2F6	40759	Max current average	0.000~9999.000	Float	A	4	R	■	
2F7	40760								
2F8	40761	Date of max current average	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
2F9	40762		Day:1~31	word	Day	2	R	■	
2FA	40763	Time of max current average	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
2FB	40764		Second:00~59	word	Second	2	R	■	
3. Minimum:0300 ~ 03FB									
300	40769	Min voltage A-B	0.0 ~ 1200000.0	Float	V	4	R	■	
301	40770								
302	40771	Date of min voltage A-B	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
303	40772		Day:1~31	word	Day	2	R	■	
304	40773	Time of min voltage A-B	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
305	40774		Second:00~59	word	Second	2	R	■	
306	40775	Min voltage B-C	0.0 ~ 1200000.0	Float	V	4	R	■	
307	40776								
308	40777	Date of min voltage B-C	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	

309	40778		Day:1~31	word	Day	2	R	■	
30A	40779	Time of min voltage B-C	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
30B	40780		Second:00~59	word	Second	2	R	■	
30C	40781	Min voltage C-A	0.0 ~ 1200000.0	Float	V	4	R	■	
30D	40782								
30E	40783	Date of min voltage C-A	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
30F	40784		Day:1~31	word	Day	2	R	■	
310	40785	Time of min voltage C-A	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
311	40786		Second:00~59	word	Second	2	R	■	
312	40787	Min voltage A-N	0.0 ~ 1200000.0	Float	V	4	R	■	
313	40788								
314	40789	Date of min voltage A-N	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
315	40790		Day:1~31	word	Day	2	R	■	
316	40791	Time of min voltage A-N	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
317	40792		Second:00~59	word	Second	2	R	■	
318	40793	Min voltage B-N	0.0 ~ 1200000.0	Float	V	4	R	■	
319	40794								
31A	40795	Date of min voltage B-N	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
31B	40796		Day:1~31	word	Day	2	R	■	
31C	40797	Time of min voltage B-N	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
31D	40798		Second:00~59	word	Second	2	R	■	
31E	40799	Min voltage C-N	0.0 ~ 1200000.0	Float	V	4	R	■	
31F	40800								
320	40801	Date of min voltage C-N	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
321	40802		Day:1~31	word	Day	2	R	■	
322	40803	Time of min voltage C-N	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
323	40804		Second:00~59	word	Second	2	R	■	
324	40805	Min current A	0.000~9999.000	Float	A	4	R	■	
325	40806								
326	40807	Date of min current A	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
327	40808		Day:1~31	word	Day	2	R	■	
328	40809	Time of min current A	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
329	40810		Second:00~59	word	Second	2	R	■	
32A	40811	Min current B	0.000~9999.000	Float	A	4	R	■	
32B	40812								
32C	40813	Date of min current B	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	

32D	40814		Day:1~31	word	Day	2	R	■	
32E	40815	Time of min current B	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
32F	40816		Second:00~59	word	Second	2	R	■	
330	40817	Min current C	0.000~9999.000	Float	A	4	R	■	
331	40818								
332	40819	Date of min current C	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
333	40820		Day:1~31	word	Day	2	R	■	
334	40821	Time of min current C	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
335	40822		Second:00~59	word	Second	2	R	■	
33C	40829	Min frequency	45.00~65.00	Float	Hz	4	R	■	
33D	40830								
33E	40831	Date of min frequency	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
33F	40832		Day:1~31	word	Day	2	R	■	
340	40833	Time of min frequency	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
341	40834		Second:00~59	word	Second	2	R	■	
342	40835	Min power factor total	-1.000 ~ 1.000 (+:Lag \ -:Advancing)	Float		4	R	■	
343	40836								
344	40837	Date of min power factor total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
345	40838		Day:1~31	word	Day	2	R	■	
346	40839	Time of min power factor total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
347	40840		Second:00~59	word	Second	2	R	■	
348	40841	Min active power total	-999,999,999~999,999,999	Float	W	4	R	■	
349	40842								
34A	40843	Date of min active power total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
34B	40844		Day:1~31	word	Day	2	R	■	
34C	40845	Time of min active power total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
34D	40846		Second:00~59	word	Second	2	R	■	
34E	40847	Min reactive power total	-999,999,999~999,999,999	Float	VAR	4	R	■	
34F	40848								
350	40849	Date of min reactive power total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
351	40850		Day:1~31	word	Day	2	R	■	
352	40851	Time of min reactive power total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
353	40852		Second:00~59	word	Second	2	R	■	
354	40853	Min apparent power total	0~999,999,999	Float	VA	4	R	■	
355	40854								
356	40855	Date of min apparent power total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	

357	40856		Day:1~31	word	Day	2	R	■	
358	40857	Time of min apparent power total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
359	40858		Second:00~59	word	Second	2	R	■	
36C	40877	Min THD voltage A-N	0.0~100.0	Float	%	4	R	■	
36D	40878								
36E	40879	Date of min voltage A total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
36F	40880		Day:1~31	word	Day	2	R	■	
370	40881	Time of min voltage A total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
371	40882		Second:00~59	word	Second	2	R	■	
372	40883	Min THD voltage B-N	0.0~100.0	Float	%	4	R	■	
373	40884								
374	40885	Date of min THD voltage B total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
375	40886		Day:1~31	word	Day	2	R	■	
376	40887	Time of min THD voltage B total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
377	40888		Second:00~59	word	Second	2	R	■	
378	40889	Min THD voltage C-N	0.0~100.0	Float	%	4	R	■	
379	40890								
37A	40891	Date of min voltage C total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
37B	40892		Day:1~31	word	Day	2	R	■	
37C	40893	Time of min voltage C total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
37D	40894		Second:00~59	word	Second	2	R	■	
384	40901	Min THD voltage	0.0~100.0	Float	%	4	R	■	
385	40902								
386	40903	Date of min voltage L-N total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
387	40904		Day:1~31	word	Day	2	R	■	
388	40905	Time of min voltage L-N total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
389	40906		Second:00~59	word	Second	2	R	■	
38A	40907	Min THD current A total	0.0~100.0	Float	%	4	R	■	
38B	40908								
38C	40909	Date of min THD current A total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
38D	40910		Day:1~31	word	Day	2	R	■	
38E	40911	Time of min THD current A total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
38F	40912		Second:00~59	word	Second	2	R	■	
390	40913	Min THD current B total	0.0~100.0	Float	%	4	R	■	
391	40914								
392	40915	Date of min THD current B total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	

393	40916		Day:1~31	word	Day	2	R	■	
394	40917	Time of min THD current B total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
395	40918		Second:00~59	word	Second	2	R	■	
396	40919	Min THD current C total	0.0~100.0	Float	%	4	R	■	
397	40920								
398	40921	Date of min THD current C total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
399	40922		Day:1~31	word	Day	2	R	■	
39A	40923	Time of min THD current C total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
39B	40924		Second:00~59	word	Second	2	R	■	
39C	40925	Min THD current total	0.0~100.0	Float	%	4	R	■	
39D	40926								
39E	40927	Date of min THD current total	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
39F	40928		Day:1~31	word	Day	2	R	■	
3A0	40929	Time of min THD current total	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
3A1	40930		Second:00~59	word	Second	2	R	■	
3EA	41003	Min voltage L-N average	0.0 ~ 1200000.0	Float	V	4	R	■	
3EB	41004								
3EC	41005	Date of min voltage L-N average	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
3ED	41006		Day:1~31	word	Day	2	R	■	
3EE	41007	Time of min voltage L-N average	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
3EF	41008		Second:00~59	word	Second	2	R	■	
3F0	41009	Min voltage L-L average	0.0 ~ 1200000.0	Float	V	4	R	■	
3F1	41010								
3F2	41011	Date of min voltage L-L average	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
3F3	41012		Day:1~31	word	Day	2	R	■	
3F4	41013	Time of min voltage L-L average	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
3F5	41014		Second:00~59	word	Second	2	R	■	
3F6	41015	Min voltage L-L average	0.0 ~ 1200000.0	Float	V	4	R	■	
3F7	41016								
3F8	41017	Date of min voltage L-L average	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
3F9	41018		Day:1~31	word	Day	2	R	■	
3FA	41019	Time of min voltage L-L average	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
3FB	41020		Second:00~59	word	Second	2	R	■	
4. Alarm:0400 ~ 0490									
400	41025	Newest alarm logging number	0: Nono 1~16: Newest number	word		2	R	■	
Alarm-1									

401	41026	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
402	41027	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
403	41028	Parameter of alarm	Depend parameter table 1	word		2	R	■	
404	41029	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
405	41030								
406	41031	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
407	41032		Day:1~31	word	Day	2	R	■	
408	41033	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
409	41034		Second:00~59	word	Second	2	R	■	
Alarm-2									
40A	41035	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
40B	41036	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
40C	41037	Parameter of alarm	Depend parameter table 1	word		2	R	■	
40D	41038	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
40E	41039								
40F	41040	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
410	41041		Day:1~31	word	Day	2	R	■	
411	41042	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
412	41043		Second:00~59	word	Second	2	R	■	
Alarm-3									
413	41044	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
414	41045	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
415	41046	Parameter of alarm	Depend parameter table 1	word		2	R	■	
416	41047	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
417	41048								
418	41049	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
419	41050		Day:1~31	word	Day	2	R	■	
41A	41051	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
41B	41052		Second:00~59	word	Second	2	R	■	
Alarm-4									
41C	41053	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
41D	41054	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
41E	41055	Parameter of alarm	Depend parameter table 1	word		2	R	■	

41F	41056	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
420	41057								
421	41058	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
422	41059		Day:1~31	word	Day	2	R	■	
423	41060	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
424	41061		Second:00~59	word	Second	2	R	■	
Alarm-5									
425	41062	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
426	41063	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
427	41064	Parameter of alarm	Depend parameter table 1	word		2	R	■	
428	41065	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
429	41066								
42A	41067	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
42B	41068		Day:1~31	word	Day	2	R	■	
42C	41069	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
42D	41070		Second:00~59	word	Second	2	R	■	
Alarm-6									
42E	41071	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
42F	41072	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
430	41073	Parameter of alarm	Depend parameter table 1	word		2	R	■	
431	41074	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
432	41075								
433	41076	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
434	41077		Day:1~31	word	Day	2	R	■	
435	41078	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
436	41079		Second:00~59	word	Second	2	R	■	
Alarm-7									
437	41080	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
438	41081	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
439	41082	Parameter of alarm	Depend parameter table 1	word		2	R	■	
43A	41083	Logging value of alarm	Depend on parameter	Float		4	R	■	

43B	41084	parameter							
43C	41085	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
43D	41086		Day:1~31	word	Day	2	R	■	
43E	41087	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
43F	41088		Second:00~59	word	Second	2	R	■	
Alarm-8									
440	41089	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
441	41090	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
442	41091	Parameter of alarm	Depend parameter table 1	word		2	R	■	
443	41092	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
444	41093								
445	41094	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
446	41095		Day:1~31	word	Day	2	R	■	
447	41096	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
448	41097		Second:00~59	word	Second	2	R	■	
Alarm-9									
449	41098	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
44A	41099	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
44B	41100	Parameter of alarm	Depend parameter table 1	word		2	R	■	
44C	41101	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
44D	41102								
44E	41103	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
44F	41104		Day:1~31	word	Day	2	R	■	
450	41105	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
451	41106		Second:00~59	word	Second	2	R	■	
Alarm-10									
452	41107	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
453	41108	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
454	41109	Parameter of alarm	Depend parameter table 1	word		2	R	■	
455	41110	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
456	41111								
457	41112	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	

458	41113		Day:1~31	word	Day	2	R	■	
459	41114	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
45A	41115		Second:00~59	word	Second	2	R	■	
Alarm-11									
45B	41116	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
45C	41117	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
45D	41118	Parameter of alarm	Depend parameter table 1	word		2	R	■	
45E	41119	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
45F	41120								
460	41121	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
461	41122		Day:1~31	word	Day	2	R	■	
462	41123	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
463	41124		Second:00~59	word	Second	2	R	■	
Alarm-12									
464	41125	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
465	41126	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
466	41127	Parameter of alarm	Depend parameter table 1	word		2	R	■	
467	41128	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
468	41129								
469	41130	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
46A	41131		Day:1~31	word	Day	2	R	■	
46B	41132	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
46C	41133		Second:00~59	word	Second	2	R	■	
Alarm-13									
46D	41134	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
46E	41135	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
46F	41136	Parameter of alarm	Depend parameter table 1	word		2	R	■	
470	41137	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
471	41138								
472	41139	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
473	41140		Day:1~31	word	Day	2	R	■	
474	41141	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	

475	41142		Second:00~59	word	Second	2	R	■	
Alarm-14									
476	41143	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
477	41144	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
478	41145	Parameter of alarm	Depend parameter table 1	word		2	R	■	
479	41146	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
47A	41147								
47B	41148	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
47C	41149		Day:1~31	word	Day	2	R	■	
47D	41150	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
47E	41151		Second:00~59	word	Second	2	R	■	
Alarm-15									
47F	41152	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
480	41153	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
481	41154	Parameter of alarm	Depend parameter table 1	word		2	R	■	
482	41155	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
483	41156								
484	41157	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
485	41158		Day:1~31	word	Day	2	R	■	
486	41159	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
487	41160		Second:00~59	word	Second	2	R	■	
Alarm-16									
488	41161	Source of alarm	1~16: Alarm-1~ Alarm-16	word		2	R	■	
489	41162	Status of alarm	0: Cleared 1: Triggered	word		2	R	■	
48A	41163	Parameter of alarm	Depend parameter table 1	word		2	R	■	
48B	41164	Logging value of alarm parameter	Depend on parameter	Float		4	R	■	
48C	41165								
48D	41166	Date of alarm	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
48E	41167		Day:1~31	word	Day	2	R	■	
48F	41168	Time of alarm	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
490	41169		Second:00~59	word	Second	2	R	■	
5. Advanced Settings #:050C ~ 051F									

50C	41293	Setting of parameter grouping #1	0x100 ~ 0x1F8	word		2	R / W	■	▲
50D	41294	Setting of parameter grouping #2	0x100 ~ 0x1F8	word		2	R / W	■	▲
⋮	⋮	⋮							
515	41302	Setting of parameter grouping #10	0x100 ~ 0x1F8	word		2	R / W	■	▲
516	41303	Setting of parameter grouping #11	0x100 ~ 0x1F8	word		3	R / W	■	▲
⋮	⋮	⋮							
51F	41312	Setting of parameter grouping #20	0x100 ~ 0x1F8	word		2	R / W	■	▲
6. Parameter Grouping:0600~0613									
600	41537	Data of parameter grouping #1		Float		2	R	■	▲
601	41538	Data of parameter grouping #2		Float		2	R	■	▲
⋮	⋮	⋮							
609	41546	Data of parameter grouping # 10		Float		2	R	■	▲
⋮	⋮	⋮							
613	41556	Data of parameter grouping # 20		Float		2	R	■	▲
7. Phasor Diagram Grouping:06C0~06C9									
6C0	41729	Phasor diagram VB lag VA	0~360.0	word	0.1 degree	2	R	■	▲
6C1	41730	Phasor diagram VC lag VA	0~360.0	word	0.1 degree	2	R	■	▲
6C2	41731	Phasor diagram CA lag VA	0~360.0	word	0.1 degree	2	R	■	▲
6C3	41732	Phasor diagram CB lag VA	0~360.0	word	0.1 degree	2	R	■	▲
6C4	41733	Phasor diagram CC lag VA	0~360.0	word	0.1 degree	2	R	■	▲
6C5	41734	Phasor diagram U23 lag U12	0~360.0	word	0.1 degree	2	R	■	▲
6C6	41735	Phasor diagram U31 lag U12	0~360.0	word	0.1 degree	2	R	■	▲
6C7	41736	Phasor diagram I1 lag U12	0~360.0	word	0.1 degree	2	R	■	▲
6C8	41737	Phasor diagram I2 lag U12	0~360.0	word	0.1 degree	2	R	■	▲
6C9	41738	Phasor diagram I3 lag U12	0~360.0	word	0.1 degree	2	R	■	▲
8. Current Month TOU:06CA~06FB									
6CA	41739	Active energy delivered(sharp)	0.0~99999999.9	Float	kWh	4	R	■	
6CB	41740								
6CC	41741	Active energy received(sharp)	0.0~99999999.9	Float	kWh	4	R	■	
6CD	41742								
6CE	41743	Reactive energy delivered(sharp)	0.0~99999999.9	Float	kVARh	4	R	■	
6CF	41744								

6D0	41745	Reactive energy received(sharp)	0.0~99999999.9	Float	kVARh	4	R	■	
6D1	41746								
6D2	41747	Apparent energy delivered(sharp)	0.0~99999999.9	Float	kVAh	4	R	■	
6D3	41748								
6D4	41749	Active energy delivered(peak)	0.0~99999999.9	Float	kWh	4	R	■	
6D5	41750								
6D6	41751	Active energy received(peak)	0.0~99999999.9	Float	kWh	4	R	■	
6D7	41752								
6D8	41753	Reactive energy delivered(peak)	0.0~99999999.9	Float	kVARh	4	R	■	
6D9	41754								
6DA	41755	Reactive energy received(peak)	0.0~99999999.9	Float	kVARh	4	R	■	
6DB	41756								
6DC	41757	Apparent energy delivered(peak)	0.0~99999999.9	Float	kVAh	4	R	■	
6DD	41758								
6DE	41759	Active energy delivered(valley)	0.0~99999999.9	Float	kWh	4	R	■	
6DF	41760								
6E0	41761	Active energy received(valley)	0.0~99999999.9	Float	kWh	4	R	■	
6E1	41762								
6E2	41763	Reactive energy delivered(valley)	0.0~99999999.9	Float	kVARh	4	R	■	
6E3	41764								
6E4	41765	Reactive energy received(valley)	0.0~99999999.9	Float	kVARh	4	R	■	
6E5	41766								
6E6	41767	Apparent energy delivered(valley)	0.0~99999999.9	Float	kVAh	4	R	■	
6E7	41768								
6E8	41769	Active energy delivered(normal)	0.0~99999999.9	Float	kWh	4	R	■	
6E9	41770								
6EA	41771	Active energy received(normal)	0.0~99999999.9	Float	kWh	4	R	■	
6EB	41772								
6EC	41773	Reactive energy delivered(normal)	0.0~99999999.9	Float	kVARh	4	R	■	
6ED	41774								
6EE	41775	Reactive energy received(normal)	0.0~99999999.9	Float	kVARh	4	R	■	
6EF	41776								
6F0	41777	Apparent energy	0.0~99999999.9	Float	kVAh	4	R	■	

6F1	41778	delivered(normal)							
6F2	41779	Active energy delivered(summary)	0.0~99999999.9	Float	kWh	4	R	■	
6F3	41780								
6F4	41781	Active energy received(summary)	0.0~99999999.9	Float	kWh	4	R	■	
6F5	41782								
6F6	41783	Reactive energy delivered(summary)	0.0~99999999.9	Float	kVARh	4	R	■	
6F7	41784								
6F8	41785	Reactive energy received(summary)	0.0~99999999.9	Float	kVARh	4	R	■	
6F9	41786								
6FA	41787	Apparent energy delivered(summary)	0.0~99999999.9	Float	kVAh	4	R	■	
6FB	41788								
9. Data Log:0800 ~ 0840									
800	42049	Log WORD number	0~999	word		2	R	■	
801	42050	Number of un-read	0~65535	word		2	R	■	
802	42051	Log read	Replay code 0x20 when data empty	word		2	R	■	
803	42052	Status reply after read	0: Clear logging data(Read and write indicators are equal) 1: Abort this time read(The next time will read from the last unread items) 2: Read success	word		2	W	■	
804	42053	Value of interval duration	1~32767	word		2	R / W	■	
805	42054	Unit of interval duration	0: Second 1: Minute 2: Hour 3: Day	word		2	R / W	■	
806	42055	Date and time for start-Year \ Month	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R / W	■	
807	42056	Date and time for start-Day	Day:1~31	word	Day	2	R / W	■	
808	42057	Date and time for start-Hour \ Minute	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R / W	■	
809	42058	Date and time for start-Second	Second:00~59	word	Second	2	R / W	■	
80A	42059	Date and time for stop-Year \ Month	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R / W	■	
80B	42060	Date and time for stop-Day	Day:1~31	word	Day	2	R / W	■	
80C	42061	Date and time for stop-Hour \ Minute	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R / W	■	
80D	42062	Date and time for stop-Second	Second:00~59	word	Second	2	R / W	■	
80E	42063	Log Stop/Start	0: Disable 1: Enable	word		2	R / W	■	

80F	42064	Log.Para 01	Depend parameter table 2	word		2	R / W	■	
810	42065	Log.Para 02	Depend parameter table 2	word		2	R / W	■	
811	42066	Log.Para 03	Depend parameter table 2	word		2	R / W	■	
812	42067	Log.Para 04	Depend parameter table 2	word		2	R / W	■	
813	42068	Log.Para 05	Depend parameter table 2	word		2	R / W	■	
814	42069	Log.Para 06	Depend parameter table 2	word		2	R / W	■	
815	42070	Log.Para 07	Depend parameter table 2	word		2	R / W	■	
816	42071	Log.Para 08	Depend parameter table 2	word		2	R / W	■	
817	42072	Log.Para 09	Depend parameter table 2	word		2	R / W	■	
818	42073	Log.Para 10	Depend parameter table 2	word		2	R / W	■	
819	42074	Log.Para 11	Depend parameter table 2	word		2	R / W	■	
81A	42075	Log.Para 12	Depend parameter table 2	word		2	R / W	■	
81B	42076	Log.Para 13	Depend parameter table 2	word		2	R / W	■	
81C	42077	Log.Para 14	Depend parameter table 2	word		2	R / W	■	
81D	42078	Log.Para 15	Depend parameter table 2	word		2	R / W	■	
81E	42079	Log.Para 16	Depend parameter table 2	word		2	R / W	■	
81F	42080	Log.Para 17	Depend parameter table 2	word		2	R / W	■	
820	42081	Log.Para 18	Depend parameter table 2	word		2	R / W	■	
821	42082	Log.Para 19	Depend parameter table 2	word		2	R / W	■	
822	42083	Log.Para 20	Depend parameter table 2	word		2	R / W	■	
823	42084	Log.Para 21	Depend parameter table 2	word		2	R / W	■	
824	42085	Log.Para 22	Depend parameter table 2	word		2	R / W	■	
825	42086	Log.Para 23	Depend parameter table 2	word		2	R / W	■	
826	42087	Log.Para 24	Depend parameter table 2	word		2	R / W	■	
827	42088	Log.Para 25	Depend parameter table 2	word		2	R / W	■	
828	42089	Log.Para 26	Depend parameter table 2	word		2	R / W	■	
829	42090	Log.Para 27	Depend parameter table 2	word		2	R / W	■	
82A	42091	Log.Para 28	Depend parameter table 2	word		2	R / W	■	
82B	42092	Log.Para 29	Depend parameter table 2	word		2	R / W	■	
82C	42093	Log.Para 30	Depend parameter table 2	word		2	R / W	■	
82D	42094	Log.Para 31	Depend parameter table 2	word		2	R / W	■	
82E	42095	Log.Para 32	Depend parameter table 2	word		2	R / W	■	

82F	42096	Log.Para 33	Depend parameter table 2	word		2	R / W	■	
830	42097	Log.Para 34	Depend parameter table 2	word		2	R / W	■	
831	42098	Log.Para 35	Depend parameter table 2	word		2	R / W	■	
832	42099	Log.Para 36	Depend parameter table 2	word		2	R / W	■	
833	42100	Log.Para 37	Depend parameter table 2	word		2	R / W	■	
834	42101	Log.Para 38	Depend parameter table 2	word		2	R / W	■	
835	42102	Log.Para 39	Depend parameter table 2	word		2	R / W	■	
836	42103	Log.Para 40	Depend parameter table 2	word		2	R / W	■	
837	42104	Log.Para 41	Depend parameter table 2	word		2	R / W	■	
838	42105	Log.Para 42	Depend parameter table 2	word		2	R / W	■	
839	42106	Log.Para 43	Depend parameter table 2	word		2	R / W	■	
83A	42107	Log.Para 44	Depend parameter table 2	word		2	R / W	■	
83B	42108	Log.Para 45	Depend parameter table 2	word		2	R / W	■	
83C	42109	Log.Para 46	Depend parameter table 2	word		2	R / W	■	
83D	42110	Log.Para 47	Depend parameter table 2	word		2	R / W	■	
83E	42111	Log.Para 48	Depend parameter table 2	word		2	R / W	■	
83F	42112	Log.Para 49	Depend parameter table 2	word		2	R / W	■	
840	42113	Log.Para 50	Depend parameter table 2	word		2	R / W	■	

parameter table 2									
No.	Parameter	No.	Parameter	No.	Parameter	No.	Parameter	No.	Parameter
0	NONE	1	FREQ	2	U1	3	U2	4	U3
5	ULL. AVG	6	U12	7	U23	8	U31	9	ULL. AVG
10	I1	11	I2	12	I3	13	I.AVG	14	IN
15	P-1	16	P-2	17	P-3	18	P.SUM	19	Q-1
20	Q-2	21	Q-3	22	Q.SUM	23	S-1	24	S-2
25	S-3	26	P.SUM	27	PF1	28	PF2	29	PF3
30	PF SUM	31	Uunbl	32	Iunbl	33	Load Type	34	P.DM
35	Q.DM	36	S.DM	37	I1 DM	38	I2 DM	39	I3 DM
40	I DM	41	Active energy delivered	42	Active energy received	43	Reactive energy delivered	44	Reactive energy received
45	Apparent energy delivered	46	THD voltage A-N	47	THD voltage B-N	48	THD voltage C-N	49	THD voltage
50	THD current A	51	THD current B	52	THD current C	53	I THD SUM.	54	Phasor diagram UB lag UA
55	Phasor diagram UC lag UA	56	Phasor diagram IA lag UA	57	Phasor diagram IB lag UA	58	Phasor diagram IC lag UA	59	Phasor diagram U23 lag U12
60	Phasor diagram U31 lag U12	61	Phasor diagram I1 lag U12	62	Phasor diagram I2 lag U12	63	Phasor diagram I3 lag U12	64	Max THD voltage A-N
65	Min THD voltage A-N	66	Max THD voltage B-N	67	Min THD voltage B-N	68	Max THD voltage C-N	69	Min THD voltage C-N

70	Max THD voltage	71	Min THD voltage	72	Max THD current A	73	Min THD current A	74	Max THD current B
75	Min THD current B	76	Max THD current C	77	Min THD current C	78	Max THD current	79	Min THD current
80	P.DM. MAX	81	P.DM. MIN	82	Q.DM. MAX	83	Q.DM. MIN	84	S.DM. MAX
85	S.DM MIN	86	I1 DM. MAX	87	I2 DM. MAX	88	I3 DM. MAX	89	I DM. MAX

10. Last Month TOU:0900~0931

900	42305	Active delivered(energy)	0.0~99999999.9	Float	kWh	4	R	■	
901	42306								
902	42307	Active received(energy)	0.0~99999999.9	Float	kWh	4	R	■	
903	42308								
904	42309	Reactive delivered(energy)	0.0~99999999.9	Float	kVARh	4	R	■	
905	42310								
906	42311	Reactive received(energy)	0.0~99999999.9	Float	kVARh	4	R	■	
907	42312								
908	42313	Apparent delivered(energy)	0.0~99999999.9	Float	kVAh	4	R	■	
909	42314								
90A	42315	Active delivered(energy)	0.0~99999999.9	Float	kWh	4	R	■	
90B	42316								
90C	42317	Active received(energy)	0.0~99999999.9	Float	kWh	4	R	■	
90D	42318								
90E	42319	Reactive delivered(energy)	0.0~99999999.9	Float	kVARh	4	R	■	
90F	42320								
910	42321	Reactive received(energy)	0.0~99999999.9	Float	kVARh	4	R	■	
911	42322								
912	42323	Apparent delivered(energy)	0.0~99999999.9	Float	kVAh	4	R	■	
913	42324								
914	42325	Active delivered(energy)	0.0~99999999.9	Float	kWh	4	R	■	
915	42326								
916	42327	Active energy	0.0~99999999.9	Float	kWh	4	R	■	

917	42328	received(valley)							
918	42329	Reactive energy delivered(valley)	0.0~99999999.9	Float	kVARh	4	R	■	
919	42330								
91A	42331	Reactive energy received(valley)	0.0~99999999.9	Float	kVARh	4	R	■	
91B	42332								
91C	42333	Apparent energy delivered(valley)	0.0~99999999.9	Float	kVAh	4	R	■	
91D	42334								
91E	42335	Active energy delivered(normal)	0.0~99999999.9	Float	kWh	4	R	■	
91F	42336								
920	42337	Active energy received(normal)	0.0~99999999.9	Float	kWh	4	R	■	
921	42338								
922	42339	Reactive energy delivered(normal)	0.0~99999999.9	Float	kVARh	4	R	■	
923	42340								
924	42341	Reactive energy received(normal)	0.0~99999999.9	Float	kVARh	4	R	■	
925	42342								
926	42343	Apparent energy delivered(normal)	0.0~99999999.9	Float	kVAh	4	R	■	
927	42344								
928	42345	Active energy delivered(summary)	0.0~99999999.9	Float	kWh	4	R	■	
929	42346								
92A	42347	Active energy received(summary)	0.0~99999999.9	Float	kWh	4	R	■	
92B	42348								
92C	42349	Reactive energy delivered(summary)	0.0~99999999.9	Float	kVARh	4	R	■	
92D	42350								
92E	42351	Reactive energy received(summary)	0.0~99999999.9	Float	kVARh	4	R	■	
92F	42352								
930	42353	Apparent energy delivered(summary)	0.0~99999999.9	Float	kVAh	4	R	■	
931	42354								
11. Maximum TOU energy demand:0A00~0AD1									
A00	42561	Max active power demand(sharp)	-999,999,999~999,999,999	Float	W	4	R	■	
A01	42562								
A02	42563	Max active power demand(sharp)date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A03	42564		Day:1~31	word	Day	2	R	■	
A04	42565	Max active power	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	

A05	42566	demand(sharp) time	Second:00~59	word	Second	2	R	■	
A06	42567	Max reactive power demand(sharp)	-999,999,999~999,999,999	Float	VAR	4	R	■	
A07	42568								
A08	42569	Max reactive power demand(sharp) date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A09	42570		Day:1~31	word	Day	2	R	■	
A0A	42571	Max reactive power demand(sharp) time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
A0B	42572		Second:00~59	word	Second	2	R	■	
A0C	42573	Max apparent power demand(sharp)	0~999,999,999	Float	VA	4	R	■	
A0D	42574								
A0E	42575	Max apparent power demand(sharp) date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A0F	42576		Day:1~31	word	Day	2	R	■	
A10	42577	Max apparent power demand(sharp) time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
A11	42578		Second:00~59	word	Second	2	R	■	
A12	42579	Max current A demand(sharp)	0.000~9999.000	Float	A	4	R	■	
A13	42580								
A14	42581	Max current A demand(sharp) date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A15	42582		Day:1~31	word	Day	2	R	■	
A16	42583	Max current A demand(sharp) time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
A17	42584		Second:00~59	word	Second	2	R	■	
A18	42585	Max current B demand(sharp)	0.000~9999.000	Float	A	4	R	■	
A19	42586								
A1A	42587	Max current B demand(sharp) date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A1B	42588		Day:1~31	word	Day	2	R	■	
A1C	42589	Max current B demand(sharp) time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
A1D	42590		Second:00~59	word	Second	2	R	■	
A1E	42591	Max current C demand(sharp)	0.000~9999.000	Float	A	4	R	■	
A1F	42592								
A20	42593	Max current C demand(sharp) date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A21	42594		Day:1~31	word	Day	2	R	■	
A22	42595	Max current C demand(sharp) time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
A23	42596		Second:00~59	word	Second	2	R	■	
A24	42597	Max current average	0.000~9999.000	Float	A	4	R	■	

A25	42598	demandsharp)							
A26	42599	Max current average demandsharp)date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A27	42600		Day:1~31	word	Day	2	R	■	
A28	42601	Max current average demandsharp)time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
A29	42602		Second:00~59	word	Second	2	R	■	
A2A	42603	Max active power demand(peak)	-999,999,999~999,999,999	Float	W	4	R	■	
A2B	42604						R	■	
A2C	42605	Max active power demand(peak)date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A2D	42606		Day:1~31	word	Day	2	R	■	
A2E	42607	Max active power demand(peak)time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
A2F	42608		Second:00~59	word	Second	2	R	■	
A30	42609	Max reactive power demand(peak)	-999,999,999~999,999,999	Float	VAR	4	R	■	
A31	42610						R	■	
A32	42611	Max reactive power demand(peak)date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A33	42612		Day:1~31	word	Day	2	R	■	
A34	42613	Max reactive power demand(peak)time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
A35	42614		Second:00~59	word	Second	2	R	■	
A36	42615	Max apparent power demand(peak)	0~999,999,999	Float	VA	4	R	■	
A37	42616						R	■	
A38	42617	Max apparent power demand(peak)date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A39	42618		Day:1~31	word	Day	2	R	■	
A3A	42619	Max apparent power demand(peak)time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
A3B	42620		Second:00~59	word	Second	2	R	■	
A3C	42621	Max current A demand(peak)	0.000~9999.000	Float	A	4	R	■	
A3D	42622						R	■	
A3E	42623	Max current A demand(peak)date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A3F	42624		Day:1~31	word	Day	2	R	■	
A40	42625	Max current A demand(peak)time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
A41	42626		Second:00~59	word	Second	2	R	■	
A42	42627	Max current B demand(peak)	0.000~9999.000	Float	A	4	R	■	
A43	42628						R	■	
A44	42629	Max current B	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	

A45	42630	demand(peak)date	Day:1~31	word	Day	2	R	■	
A46	42631	Max current B demand(peak)time	Hour:00~23 (high byte)	byte	Hour-Minute	2	R	■	
A47	42632		Minute:00~59 (low byte)						
A48	42633	Max current C demand(peak)	0.000~9999.000	Float	A	4	R	■	
A49	42634								
A4A	42635	Max current C demand(peak)date	Year:00~99 (high byte)	byte	Year-Month	2	R	■	
A4B	42636		Month:1~12 (low byte)						
A4C	42637	Max current C demand(peak)time	Hour:00~23 (high byte)	byte	Hour-Minute	2	R	■	
A4D	42638		Minute:00~59 (low byte)						
A4E	42639	Max current average demand(peak)	0.000~9999.000	Float	A	4	R	■	
A4F	42640								
A50	42641	Max current average demand(peak)date	Year:00~99 (high byte)	byte	Year-Month	2	R	■	
A51	42642		Month:1~12 (low byte)						
A52	42643	Max current average demand(peak)time	Hour:00~23 (high byte)	byte	Hour-Minute	2	R	■	
A53	42644		Minute:00~59 (low byte)						
A54	42645	Max active power demand(valley)	-999,999,999~999,999,999	Float	W	4	R	■	
A55	42646								
A56	42647	Max active power demand(valley) date	Year:00~99 (high byte)	byte	Year-Month	2	R	■	
A57	42648		Month:1~12 (low byte)						
A58	42649	Max active power demand(valley) time	Hour:00~23 (high byte)	byte	Hour-Minute	2	R	■	
A59	42650		Minute:00~59 (low byte)						
A5A	42651	Max reactive power demand(valley)	-999,999,999~999,999,999	Float	VAR	4	R	■	
A5B	42652								
A5C	42653	Max reactive power demand(valley) date	Year:00~99 (high byte)	byte	Year-Month	2	R	■	
A5D	42654		Month:1~12 (low byte)						
A5E	42655	Max reactive power demand(valley) time	Hour:00~23 (high byte)	byte	Hour-Minute	2	R	■	
A5F	42656		Minute:00~59 (low byte)						
A60	42657	Max apparent power demand(valley)	0~999,999,999	Float	VA	4	R	■	
A61	42658								
A62	42659	Max apparent power demand(valley) date	Year:00~99 (high byte)	byte	Year-Month	2	R	■	
A63	42660		Month:1~12 (low byte)						
A64	42661	Max apparent power	Day:1~31	word	Day	2	R	■	
			Hour:00~23 (high byte)	byte	Hour-Minute	2	R	■	
			Minute:00~59 (low byte)						

A65	42662	demand(valley) time	Second:00~59	word	Second	2	R	■	
A66	42663	Max current A demand(valley)	0.000~9999.000	Float	A	4	R	■	
A67	42664								
A68	42665	Max current A demand(valley) date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A69	42666		Day:1~31	word	Day	2	R	■	
A6A	42667	Max current A demand(valley) time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
A6B	42668		Second:00~59	word	Second	2	R	■	
A6C	42669	Max current B demand(valley)	0.000~9999.000	Float	A	4	R	■	
A6D	42670								
A6E	42671	Max current B demand(valley) date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A6F	42672		Day:1~31	word	Day	2	R	■	
A70	42673	Max current B demand(valley) time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
A71	42674		Second:00~59	word	Second	2	R	■	
A72	42675	Max current C demand(valley)	0.000~9999.000	Float	A	4	R	■	
A73	42676								
A74	42677	Max current C demand(valley) date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A75	42678		Day:1~31	word	Day	2	R	■	
A76	42679	Max current C demand(valley) time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
A77	42680		Second:00~59	word	Second	2	R	■	
A78	42681	Max current average demand(valley)	0.000~9999.000	Float	A	4	R	■	
A79	42682								
A7A	42683	Max current average demand(valley)date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A7B	42684		Day:1~31	word	Day	2	R	■	
A7C	42685	Max current average demand(valley)time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
A7D	42686		Second:00~59	word	Second	2	R	■	
A7E	42687	Max active power demand(normal)	-999,999,999~999,999,9 99	Float	W	4	R	■	
A7F	42688								
A80	42689	Max active power demand(normal) date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A81	42690		Day:1~31	word	Day	2	R	■	
A82	42691	Max active power demand(normal) time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
A83	42692		Second:00~59	word	Second	2	R	■	
A84	42693	Max reactive power	-999,999,999~999,999,9	Float	VAR	4	R	■	

A85	42694	demand(normal)	99						
A86	42695	Max reactive power demand(normal) date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A87	42696		Day:1~31	word	Day	2	R	■	
A88	42697	Max reactive power demand(normal) time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
A89	42698		Second:00~59	word	Second	2	R	■	
A8A	42699	Max apparent power demand(normal)	0~999,999,999	Float	VA	4	R	■	
A8B	42700								
A8C	42701	Max apparent power demand(normal) date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A8D	42702		Day:1~31	word	Day	2	R	■	
A8E	42703	Max apparent power demand(normal) time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
A8F	42704		Second:00~59	word	Second	2	R	■	
A90	42705	Max current A demand(normal)	0.000~9999.000	Float	A	4	R	■	
A91	42706								
A92	42707	Max current A demand(normal) date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A93	42708		Day:1~31	word	Day	2	R	■	
A94	42709	Max current A demand(normal) time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
A95	42710		Second:00~59	word	Second	2	R	■	
A96	42711	Max current B demand(normal)	0.000~9999.000	Float	A	4	R	■	
A97	42712								
A98	42713	Max current B demand(normal) date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A99	42714		Day:1~31	word	Day	2	R	■	
A9A	42715	Max current B demand(normal) time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
A9B	42716		Second:00~59	word	Second	2	R	■	
A9C	42717	Max current C demand(normal)	0.000~9999.000	Float	A	4	R	■	
A9D	42718								
A9E	42719	Max current C demand(normal) date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
A9F	42720		Day:1~31	word	Day	2	R	■	
AA0	42721	Max current C demand(normal)time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
AA1	42722		Second:00~59	word	Second	2	R	■	
AA2	42723	Max current average demand(normal)	0.000~9999.000	Float	A	4	R	■	
AA3	42724								
AA4	42725	Max current average	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	

AA5	42726	demand(normal) date	Day:1~31	word	Day	2	R	■	
AA6	42727	Max current average demand(normal) time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
AA7	42728		Second:00~59	word	Second	2	R	■	
AA8	42729	Max active power demand(summary)	-999,999,999~999,999,9 99	Float	W	4	R	■	
AA9	42730								
AAA	42731	Max active power demand(summary)date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
AAB	42732		Day:1~31	word	Day	2	R	■	
AAC	42733	Max active power demand(summary)time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
AAD	42734		Second:00~59	word	Second	2	R	■	
AAE	42735	Max reactive power demand(summary)	-999,999,999~999,999,9 99	Float	VAR	4	R	■	
AAF	42736								
AB0	42737	Max reactive power demand(summary)date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
AB1	42738		Day:1~31	word	Day	2	R	■	
AB2	42739	Max reactive power demand(summary)time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
AB3	42740		Second:00~59	word	Second	2	R	■	
AB4	42741	Max apparent power demand(summary)	0~999,999,999	Float	VA	4	R	■	
AB5	42742								
AB6	42743	Max apparent power demand(summary)date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
AB7	42744		Day:1~31	word	Day	2	R	■	
AB8	42745	Max apparent power demand(summary)time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
AB9	42746		Second:00~59	word	Second	2	R	■	
ABA	42747	Max current A demand(summary)	0.000~9999.000	Float	A	4	R	■	
ABB	42748								
ABC	42749	Max current A demand(summary)date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
ABD	42750		Day:1~31	word	Day	2	R	■	
ABE	42751	Max current A demand(summary)time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	
ABF	42752		Second:00~59	word	Second	2	R	■	
AC0	42753	Max current B demand(summary)	0.000~9999.000	Float	A	4	R	■	
AC1	42754								
AC2	42755	Max current B demand(summary)date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
AC3	42756		Day:1~31	word	Day	2	R	■	
AC4	42757	Max current B	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minut e	2	R	■	

AC5	42758	demand(summary)time	Second:00~59	word	Second	2	R	■	
AC6	42759	Max current C demand(summary)	0.000~9999.000	Float	A	4	R	■	
AC7	42760								
AC8	42761	Max current C demand(summary)date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
AC9	42762		Day:1~31	word	Day	2	R	■	
ACA	42763	Max current C demand(summary)time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
ACB	42764		Second:00~59	word	Second	2	R	■	
ACC	42765	Max current average demandsummary)	0.000~9999.000	Float	A	4	R	■	
ACD	42766								
ACE	42767	Max current average demandsummary)date	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
ACF	42768		Day:1~31	word	Day	2	R	■	
AD0	42769	Max current average demandsummary)time	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
AD1	42770		Second:00~59	word	Second	2	R	■	
AD2	42771	Reset max TOU demand	0x55:Reset	word		2	W	■	
5 12. TOU parameter setting:0AD3~0D28									
AD3	42772	Year zone	1~4	word		2	R / W	■	
AD4	42773	Time table	1~8	word		2	R / W	■	
AD5	42774	Time table of Saturday	1~8	word		2	R / W	■	
AD6	42775	Timetable of Sunday	1~8	word		2	R / W	■	
AD7	42776	TOU enable	0: Disable 1: Enable	word		2	R / W	■	
AD8	42777	Initialization of TOU	0: None 1: Initialize	word		2	R / W	■	
AD9	42778	Calculation of TOU	0: End of month 1: Setting day	word		2	R / W	■	
ADA	42779	TOU settle date: Day	1~31	word	Day	2	R / W	■	
ADB	42780	TOU settle date: Hour	0~23	word	Hour	2	R / W	■	
ADC	42781	TOU settle date: Minute	0~59	word	Minute	2	R / W	■	
ADD	42782	TOU settle date:Second	0~59	word	Second	2	R / W	■	
ADE	42783	Error code	0: The setting of parameter is correct; if any error occurs , the TOU function will be stop execute 1: The date setting of the time zone is not a close cycle 2: The time table setting of the time zone is greater than number of time table	word		2	R	■	

			4: Year setting of multi-years error or greater than 5 years ;The time table setting of the multi-years is greater than number of time table 8: The time setting of the time interval is not a close cycle 16: The time table setting of the weekly rest is greater than number of time table 32: The time table setting of the single year holiday is greater than number of time table						
ADF	42784	1st season-Month	1~12	word	Month	2	R / W	■	
AE0	42785	1st season-Day	1~31	word	Day	2	R / W	■	
AE1	42786	1st season-Time table number	1~8	word		2	R / W	■	
AE2	42787	2nd season-Month	1~12	word	Month	2	R / W	■	
AE3	42788	2nd season-Day	1~31	word	Day	2	R / W	■	
AE4	42789	2nd season-Time table number	1~8	word		2	R / W	■	
AE5	42790	3rd season-Month	1~12	word	Month	2	R / W	■	
AE6	42791	3rd season-Day	1~31	word	Day	2	R / W	■	
AE7	42792	3rd season-Time table number	1~8	word		2	R / W	■	
AE8	42793	4th season-Month	1~12	word	Month	2	R / W	■	
AE9	42794	4th season-Day	1~31	word	Day	2	R / W	■	
AEA	42795	4th season-Time table number	1~8	word		2	R / W	■	
AEB	42796	Number of time interval in the 1st time table	1~8	word		2	R / W	■	
AEC	42797	1st time interval of the 1st time table(Hour)	0~23	word	Hour	2	R / W	■	
AED	42798	1st time interval of the 1st time table(Minute)	0~59	word	Minute	2	R / W	■	
AEE	42799	1st time interval fee of the 1st time table	0~3	word		2	R / W	■	
AEF	42800	2nd time interval of the 1st time table(Hour)	0~23	word	Hour	2	R / W	■	
AF0	42801	2nd time interval of the 1st time table(Minute)	0~59	word	Minute	2	R / W	■	
AF1	42802	2nd time interval fee of the 1st time table	0~3	word		2	R / W	■	
AF2	42803	3rd time interval of the 1st time table(Hour)	0~23	word	Hour	2	R / W	■	
AF3	42804	3rd time interval of the 1st time table(Minute)	0~59	word	Minute	2	R / W	■	
AF4	42805	3rd time interval fee of the 1st time table	0~3	word		2	R / W	■	

AF5	42806	4th time interval of the 1st time table(Hour)	0~23	word	Hour	2	R / W	■	
AF6	42807	4th time interval of the 1st time table(Minute)	0~59	word	Minute	2	R / W	■	
AF7	42808	4th time interval fee of the 1st time table	0~3	word		2	R / W	■	
AF8	42809	5th time interval of the 1st time table(Hour)	0~23	word	Hour	2	R / W	■	
AF9	42810	5th time interval of the 1st time table(Minute)	0~59	word	Minute	2	R / W	■	
AFA	42811	5th time interval fee of the 1st time table	0~3	word		2	R / W	■	
AFB	42812	6th time interval of the 1st time table(Hour)	0~23	word	Hour	2	R / W	■	
AFC	42813	6th time interval of the 1st time table(Minute)	0~59	word	Minute	2	R / W	■	
AFD	42814	6th time interval fee of the 1st time table	0~3	word		2	R / W	■	
AFE	42815	7th time interval of the 1st time table(Hour)	0~23	word	Hour	2	R / W	■	
AFF	42816	7th time interval of the 1st time table(Minute)	0~59	word	Minute	2	R / W	■	
B00	42817	7th time interval fee of the 1st time table	0~3	word		2	R / W	■	
B01	42818	8th time interval of the 1st time table(Hour)	0~23	word	Hour	2	R / W	■	
B02	42819	8th time interval of the 1st time table(Minute)	0~59	word	Minute	2	R / W	■	
B03	42820	8th time interval fee of the 1st time table	0~3	word		2	R / W	■	
B04	42821	1st of time interval in the 2nd time table	1~8	word		2	R / W	■	
B05	42822	1st time interval of the 2nd time table(Hour)	0~23	word	Hour	2	R / W	■	
B06	42823	1st time interval of the 2nd time table(Minute)	0~59	word	Minute	2	R / W	■	
B07	42824	1st time interval fee of the 2nd time table	0~3	word		2	R / W	■	
B08	42825	2nd time interval of the 2nd time table(Hour)	0~23	word	Hour	2	R / W	■	
B09	42826	2nd time interval of the 2nd time table(Minute)	0~59	word	Minute	2	R / W	■	
B0A	42827	2nd time interval fee of the 2nd time table	0~3	word		2	R / W	■	
B0B	42828	3rd time interval of the 2nd time table(Hour)	0~23	word	Hour	2	R / W	■	
B0C	42829	3rd time interval of the 2nd time table(Minute)	0~59	word	Minute	2	R / W	■	
B0D	42830	3rd time interval fee of the 2nd time table	0~3	word		2	R / W	■	
B0E	42831	4th time interval of the 2nd time table(Hour)	0~23	word	Hour	2	R / W	■	
B0F	42832	4th time interval of the 2nd time table(Minute)	0~59	word	Minute	2	R / W	■	
B10	42833	4th time interval fee of the 2nd time table	0~3	word		2	R / W	■	
B11	42834	5th time interval of the 2nd time table(Hour)	0~23	word	Hour	2	R / W	■	
B12	42835	5th time interval of the 2nd time table(Minute)	0~59	word	Minute	2	R / W	■	
B13	42836	5th time interval fee of the 2nd time table	0~3	word		2	R / W	■	

B14	42837	6th time interval of the 2nd time table(Hour)	0~23	word	Hour	2	R / W	■	
B15	42838	6th time interval of the 2nd time table(Minute)	0~59	word	Minute	2	R / W	■	
B16	42839	6th time interval fee of the 2nd time table	0~3	word		2	R / W	■	
B17	42840	7th time interval of the 2nd time table(Hour)	0~23	word	Hour	2	R / W	■	
B18	42841	7th time interval of the 2nd time table(Minute)	0~59	word	Minute	2	R / W	■	
B19	42842	7th time interval fee of the 2nd time table	0~3	word		2	R / W	■	
B1A	42843	8th time interval of the 2nd time table(Hour)	0~23	word	Hour	2	R / W	■	
B1B	42844	8th time interval of the 2nd time table(Minute)	0~59	word	Minute	2	R / W	■	
B1C	42845	8th time interval fee of the 2nd time table	0~3	word		2	R / W	■	
B1D	42846	1st of time interval in the 3rd time table	1~8	word		2	R / W	■	
B1E	42847	1st time interval of the 3rd time table(Hour)	0~23	word	Hour	2	R / W	■	
B1F	42848	1st time interval of the 3rd time table(Minute)	0~59	word	Minute	2	R / W	■	
B20	42849	1st time interval fee of the 3rd time table	0~3	word		2	R / W	■	
B21	42850	2nd time interval of the 3rd time table(Hour)	0~23	word	Hour	2	R / W	■	
B22	42851	2nd time interval of the 3rd time table(Minute)	0~59	word	Minute	2	R / W	■	
B23	42852	2nd time interval fee of the 3rd time table	0~3	word		2	R / W	■	
B24	42853	3rd time interval of the 3rd time table(Hour)	0~23	word	Hour	2	R / W	■	
B25	42854	3rd time interval of the 3rd time table(Minute)	0~59	word	Minute	2	R / W	■	
B26	42855	3rd time interval fee of the 3rd time table	0~3	word		2	R / W	■	
B27	42856	4th time interval of the 3rd time table(Hour)	0~23	word	Hour	2	R / W	■	
B28	42857	4th time interval of the 3rd time table(Minute)	0~59	word	Minute	2	R / W	■	
B29	42858	4th time interval fee of the 3rd time table	0~3	word		2	R / W	■	
B2A	42859	5th time interval of the 3rd time table(Hour)	0~23	word	Hour	2	R / W	■	
B2B	42860	5th time interval of the 3rd time table(Minute)	0~59	word	Minute	2	R / W	■	
B2C	42861	5th time interval fee of the 3rd time table	0~3	word		2	R / W	■	
B2D	42862	6th time interval of the 3rd time table(Hour)	0~23	word	Hour	2	R / W	■	
B2E	42863	6th time interval of the 3rd time table(Minute)	0~59	word	Minute	2	R / W	■	
B2F	42864	6th time interval fee of the 3rd time table	0~3	word		2	R / W	■	
B30	42865	7th time interval of the 3rd time table(Hour)	0~23	word	Hour	2	R / W	■	
B31	42866	7th time interval of the 3rd time table(Minute)	0~59	word	Minute	2	R / W	■	
B32	42867	7th time interval fee of the 3rd time table	0~3	word		2	R / W	■	
B33	42868	8th time interval of the 3rd time table(Hour)	0~23	word	Hour	2	R / W	■	

B34	42869	8th time interval of the 3rd time table(Minute)	0~59	word	Minute	2	R / W	■	
B35	42870	8th time interval fee of the 3rd time table	0~3	word		2	R / W	■	
B36	42871	1st of time interval in the 4th time table	1~8	word		2	R / W	■	
B37	42872	1st time interval of the 4th time table(Hour)	0~23	word	Hour	2	R / W	■	
B38	42873	1st time interval of the 4th time table(Minute)	0~59	word	Minute	2	R / W	■	
B39	42874	1st time interval fee of the 4th time table	0~3	word		2	R / W	■	
B3A	42875	2nd time interval of the 4th time table(Hour)	0~23	word	Hour	2	R / W	■	
B3B	42876	2nd time interval of the 4th time table(Minute)	0~59	word	Minute	2	R / W	■	
B3C	42877	2nd time interval fee of the 4th time table	0~3	word		2	R / W	■	
B3D	42878	3rd time interval of the 4th time table(Hour)	0~23	word	Hour	2	R / W	■	
B3E	42879	3rd time interval of the 4th time table(Minute)	0~59	word	Minute	2	R / W	■	
B3F	42880	3rd time interval fee of the 4th time table	0~3	word		2	R / W	■	
B40	42881	4th time interval of the 4th time table(Hour)	0~23	word	Hour	2	R / W	■	
B41	42882	4th time interval of the 4th time table(Minute)	0~59	word	Minute	2	R / W	■	
B42	42883	4th time interval fee of the 4th time table	0~3	word		2	R / W	■	
B43	42884	5th time interval of the 4th time table(Hour)	0~23	word	Hour	2	R / W	■	
B44	42885	5th time interval of the 4th time table(Minute)	0~59	word	Minute	2	R / W	■	
B45	42886	5th time interval fee of the 4th time table	0~3	word		2	R / W	■	
B46	42887	6th time interval of the 4th time table(Hour)	0~23	word	Hour	2	R / W	■	
B47	42888	6th time interval of the 4th time table(Minute)	0~59	word	Minute	2	R / W	■	
B48	42889	6th time interval fee of the 4th time table	0~3	word		2	R / W	■	
B49	42890	7th time interval of the 4th time table(Hour)	0~23	word	Hour	2	R / W	■	
B4A	42891	7th time interval of the 4th time table(Minute)	0~59	word	Minute	2	R / W	■	
B4B	42892	7th time interval fee of the 4th time table	0~3	word		2	R / W	■	
B4C	42893	8th time interval of the 4th time table(Hour)	0~23	word	Hour	2	R / W	■	
B4D	42894	8th time interval of the 4th time table(Minute)	0~59	word	Minute	2	R / W	■	
B4E	42895	8th time interval fee of the 4th time table	0~3	word		2	R / W	■	
B4F	42896	1st of time interval in the 5th time table	1~8	word		2	R / W	■	
B50	42897	1st time interval of the 5th time table(Hour)	0~23	word	Hour	2	R / W	■	
B51	42898	1st time interval of the 5th time table(Minute)	0~59	word	Minute	2	R / W	■	
B52	42899	1st time interval fee of the 5th time table	0~3	word		2	R / W	■	
B53	42900	2nd time interval of the 5th time table(Hour)	0~23	word	Hour	2	R / W	■	

B54	42901	2nd time interval of the 5th time table(Minute)	0~59	word	Minute	2	R / W	■	
B55	42902	2nd time interval fee of the 5th time table	0~3	word		2	R / W	■	
B56	42903	3rd time interval of the 5th time table(Hour)	0~23	word	Hour	2	R / W	■	
B57	42904	3rd time interval of the 5th time table(Minute)	0~59	word	Minute	2	R / W	■	
B58	42905	3rd time interval fee of the 5th time table	0~3	word		2	R / W	■	
B59	42906	4th time interval of the 5th time table(Hour)	0~23	word	Hour	2	R / W	■	
B5A	42907	4th time interval of the 5th time table(Minute)	0~59	word	Minute	2	R / W	■	
B5B	42908	4th time interval fee of the 5th time table	0~3	word		2	R / W	■	
B5C	42909	5th time interval of the 5th time table(Hour)	0~23	word	Hour	2	R / W	■	
B5D	42910	5th time interval of the 5th time table(Minute)	0~59	word	Minute	2	R / W	■	
B5E	42911	5th time interval fee of the 5th time table	0~3	word		2	R / W	■	
B5F	42912	6th time interval of the 5th time table(Hour)	0~23	word	Hour	2	R / W	■	
B60	42913	6th time interval of the 5th time table(Minute)	0~59	word	Minute	2	R / W	■	
B61	42914	6th time interval fee of the 5th time table	0~3	word		2	R / W	■	
B62	42915	7th time interval of the 5th time table(Hour)	0~23	word	Hour	2	R / W	■	
B63	42916	7th time interval of the 5th time table(Minute)	0~59	word	Minute	2	R / W	■	
B64	42917	7th time interval fee of the 5th time table	0~3	word		2	R / W	■	
B65	42918	8th time interval of the 5th time table(Hour)	0~23	word	Hour	2	R / W	■	
B66	42919	8th time interval of the 5th time table(Minute)	0~59	word	Minute	2	R / W	■	
B67	42920	8th time interval fee of the 5th time table	0~3	word		2	R / W	■	
B68	42921	1st of time interval in the 6th time table	1~8	word		2	R / W	■	
B69	42922	1st time interval of the 6th time table(Hour)	0~23	word	Hour	2	R / W	■	
B6A	42923	1st time interval of the 6th time table(Minute)	0~59	word	Minute	2	R / W	■	
B6B	42924	1st time interval fee of the 6th time table	0~3	word		2	R / W	■	
B6C	42925	2nd time interval of the 6th time table(Hour)	0~23	word	Hour	2	R / W	■	
B6D	42926	2nd time interval of the 6th time table(Minute)	0~59	word	Minute	2	R / W	■	
B6E	42927	2nd time interval fee of the 6th time table	0~3	word		2	R / W	■	
B6F	42928	3rd time interval of the 6th time table(Hour)	0~23	word	Hour	2	R / W	■	
B70	42929	3rd time interval of the 6th time table(Minute)	0~59	word	Minute	2	R / W	■	
B71	42930	3rd time interval fee of the 6th time table	0~3	word		2	R / W	■	
B72	42931	4th time interval of the 6th time table(Hour)	0~23	word	Hour	2	R / W	■	
B73	42932	4th time interval of the 6th time table(Minute)	0~59	word	Minute	2	R / W	■	

B74	42933	4th time interval fee of the 6th time table	0~3	word		2	R / W	■	
B75	42934	5th time interval of the 6th time table(Hour)	0~23	word	Hour	2	R / W	■	
B76	42935	5th time interval of the 6th time table(Minute)	0~59	word	Minute	2	R / W	■	
B77	42936	5th time interval fee of the 6th time table	0~3	word		2	R / W	■	
B78	42937	6th time interval of the 6th time table(Hour)	0~23	word	Hour	2	R / W	■	
B79	42938	6th time interval of the 6th time table(Minute)	0~59	word	Minute	2	R / W	■	
B7A	42939	6th time interval fee of the 6th time table	0~3	word		2	R / W	■	
B7B	42940	7th time interval of the 6th time table(Hour)	0~23	word	Hour	2	R / W	■	
B7C	42941	7th time interval of the 6th time table(Minute)	0~59	word	Minute	2	R / W	■	
B7D	42942	7th time interval fee of the 6th time table	0~3	word		2	R / W	■	
B7E	42943	8th time interval of the 6th time table(Hour)	0~23	word	Hour	2	R / W	■	
B7F	42944	8th time interval of the 6th time table(Minute)	0~59	word	Minute	2	R / W	■	
B80	42945	8th time interval fee of the 6th time table	0~3	word		2	R / W	■	
B81	42946	1st of time interval in the 7th time table	1~8	word		2	R / W	■	
B82	42947	1st time interval of the 7th time table(Hour)	0~23	word	Hour	2	R / W	■	
B83	42948	1st time interval of the 7th time table(Minute)	0~59	word	Minute	2	R / W	■	
B84	42949	1st time interval fee of the 7th time table	0~3	word		2	R / W	■	
B85	42950	2nd time interval of the 7th time table(Hour)	0~23	word	Hour	2	R / W	■	
B86	42951	2nd time interval of the 7th time table(Minute)	0~59	word	Minute	2	R / W	■	
B87	42952	2nd time interval fee of the 7th time table	0~3	word		2	R / W	■	
B88	42953	3rd time interval of the 7th time table(Hour)	0~23	word	Hour	2	R / W	■	
B89	42954	3rd time interval of the 7th time table(Minute)	0~59	word	Minute	2	R / W	■	
B8A	42955	3rd time interval fee of the 7th time table	0~3	word		2	R / W	■	
B8B	42956	4th time interval of the 7th time table(Hour)	0~23	word	Hour	2	R / W	■	
B8C	42957	4th time interval of the 7th time table(Minute)	0~59	word	Minute	2	R / W	■	
B8D	42958	4th time interval fee of the 7th time table	0~3	word		2	R / W	■	
B8E	42959	5th time interval of the 7th time table(Hour)	0~23	word	Hour	2	R / W	■	
B8F	42960	5th time interval of the 7th time table(Minute)	0~59	word	Minute	2	R / W	■	
B90	42961	5th time interval fee of the 7th time table	0~3	word		2	R / W	■	
B91	42962	6th time interval of the 7th time table(Hour)	0~23	word	Hour	2	R / W	■	
B92	42963	6th time interval of the 7th time table(Minute)	0~59	word	Minute	2	R / W	■	
B93	42964	6th time interval fee of the 7th time table	0~3	word		2	R / W	■	

B94	42965	7th time interval of the 7th time table(Hour)	0~23	word	Hour	2	R / W	■	
B95	42966	7th time interval of the 7th time table(Minute)	0~59	word	Minute	2	R / W	■	
B96	42967	7th time interval fee of the 7th time table	0~3	word		2	R / W	■	
B97	42968	8th time interval of the 7th time table(Hour)	0~23	word	Hour	2	R / W	■	
B98	42969	8th time interval of the 7th time table(Minute)	0~59	word	Minute	2	R / W	■	
B99	42970	8th time interval fee of the 7th time table	0~3	word		2	R / W	■	
B9A	42971	1st of time interval in the 8th time table	1~8	word		2	R / W	■	
B9B	42972	1st time interval of the 8th time table(Hour)	0~23	word	Hour	2	R / W	■	
B9C	42973	1st time interval of the 8th time table(Minute)	0~59	word	Minute	2	R / W	■	
B9D	42974	1st time interval fee of the 8th time table	0~3	word		2	R / W	■	
B9E	42975	2nd time interval of the 8th time table(Hour)	0~23	word	Hour	2	R / W	■	
B9F	42976	2nd time interval of the 8th time table(Minute)	0~59	word	Minute	2	R / W	■	
BA0	42977	2nd time interval fee of the 8th time table	0~3	word		2	R / W	■	
BA1	42978	3rd time interval of the 8th time table(Hour)	0~23	word	Hour	2	R / W	■	
BA2	42979	3rd time interval of the 8th time table(Minute)	0~59	word	Minute	2	R / W	■	
BA3	42980	3rd time interval fee of the 8th time table	0~3	word		2	R / W	■	
BA4	42981	4th time interval of the 8th time table(Hour)	0~23	word	Hour	2	R / W	■	
BA5	42982	4th time interval of the 8th time table(Minute)	0~59	word	Minute	2	R / W	■	
BA6	42983	4th time interval fee of the 8th time table	0~3	word		2	R / W	■	
BA7	42984	5th time interval of the 8th time table(Hour)	0~23	word	Hour	2	R / W	■	
BA8	42985	5th time interval of the 8th time table(Minute)	0~59	word	Minute	2	R / W	■	
BA9	42986	5th time interval fee of the 8th time table	0~3	word		2	R / W	■	
BAA	42987	6th time interval of the 8th time table(Hour)	0~23	word	Hour	2	R / W	■	
BAB	42988	6th time interval of the 8th time table(Minute)	0~59	word	Minute	2	R / W	■	
BAC	42989	6th time interval fee of the 8th time table	0~3	word		2	R / W	■	
BAD	42990	7th time interval of the 8th time table(Hour)	0~23	word	Hour	2	R / W	■	
BAE	42991	7th time interval of the 8th time table(Minute)	0~59	word	Minute	2	R / W	■	
BAF	42992	7th time interval fee of the 8th time table	0~3	word		2	R / W	■	
BB0	42993	8th time interval of the 8th time table(Hour)	0~23	word	Hour	2	R / W	■	
BB1	42994	8th time interval of the 8th time table(Minute)	0~59	word	Minute	2	R / W	■	
BB2	42995	8th time interval fee of the 8th time table	0~3	word		2	R / W	■	
BB3	42996	Multi-years	0: Disable 1: Enable	word		2	R / W	■	

BB4	42997	Start year of multi-years	2000~2099	word	Year	2	R / W	■	
BB5	42998	End year of multi-years (1 < (End year - Start year)+1 ≤ 5)	2000~2099	word	Year	2	R / W	■	
BB6	42999	Number of holiday in a year	0~20	word		2	R / W	■	
BB7	43000	Date of the 1st holiday (Month)	1~12	word	Month	2	R / W	■	
BB8	43001	Date of the 1st holiday (Day)	1~31	word	Day	2	R / W	■	
BB9	43002	Time table of the 1st holiday	1~8	word		2	R / W	■	
BBA	43003	Date of the 2nd holiday (Month)	1~12	word	Month	2	R / W	■	
BBB	43004	Date of the 2nd holiday (Day)	1~31	word	Day	2	R / W	■	
BBC	43005	Time table of the 2nd holiday	1~8	word		2	R / W	■	
BBD	43006	Date of the 3rd holiday (Month)	1~12	word	Month	2	R / W	■	
BBE	43007	Date of the 3rd holiday (Day)	1~31	word	Day	2	R / W	■	
BBF	43008	Time table of the 3rd holiday	1~8	word		2	R / W	■	
BC0	43009	Date of the 4th holiday (Month)	1~12	word	Month	2	R / W	■	
BC1	43010	Date of the 4th holiday (Day)	1~31	word	Day	2	R / W	■	
BC2	43011	Time table of the 4th holiday	1~8	word		2	R / W	■	
BC3	43012	Date of the 5th holiday (Month)	1~12	word	Month	2	R / W	■	
BC4	43013	Date of the 5th holiday (Day)	1~31	word	Day	2	R / W	■	
BC5	43014	Time table of the 5th holiday	1~8	word		2	R / W	■	
BC6	43015	Date of the 6th holiday (Month)	1~12	word	Month	2	R / W	■	
BC7	43016	Date of the 6th holiday (Day)	1~31	word	Day	2	R / W	■	
BC8	43017	Time table of the 6th holiday	1~8	word		2	R / W	■	
BC9	43018	Date of the 7th holiday (Month)	1~12	word	Month	2	R / W	■	
BCA	43019	Date of the 7th holiday (Day)	1~31	word	Day	2	R / W	■	
BCB	43020	Time table of the 7th holiday	1~8	word		2	R / W	■	
BCC	43021	Date of the 8th holiday (Month)	1~12	word	Month	2	R / W	■	
BCD	43022	Date of the 8th holiday (Day)	1~31	word	Day	2	R / W	■	
BCE	43023	Time table of the 8th holiday	1~8	word		2	R / W	■	
BCF	43024	Date of the 9th holiday (Month)	1~12	word	Month	2	R / W	■	
BD0	43025	Date of the 9th holiday (Day)	1~31	word	Day	2	R / W	■	
BD1	43026	Time table of the 9th holiday	1~8	word		2	R / W	■	
BD2	43027	Date of the 10th holiday (Month)	1~12	word	Month	2	R / W	■	

BD3	43028	Date of the 10th holiday (Day)	1~31	word	Day	2	R / W	■	
BD4	43029	Time table of the 10th holiday	1~8	word		2	R / W	■	
BD5	43030	Date of the 11th holiday (Month)	1~12	word	Month	2	R / W	■	
BD6	43031	Date of the 11th holiday (Day)	1~31	word	Day	2	R / W	■	
BD7	43032	Time table of the 11th holiday	1~8	word		2	R / W	■	
BD8	43033	Date of the 12th holiday (Month)	1~12	word	Month	2	R / W	■	
BD9	43034	Date of the 12th holiday (Day)	1~31	word	Day	2	R / W	■	
BDA	43035	Time table of the 12th holiday	1~8	word		2	R / W	■	
BDB	43036	Date of the 13th holiday (Month)	1~12	word	Month	2	R / W	■	
BDC	43037	Date of the 13th holiday (Day)	1~31	word	Day	2	R / W	■	
BDD	43038	Time table of the 13th holiday	1~8	word		2	R / W	■	
BDE	43039	Date of the 14th holiday (Month)	1~12	word	Month	2	R / W	■	
BDF	43040	Date of the 14th holiday (Day)	1~31	word	Day	2	R / W	■	
BE0	43041	Time table of the 14th holiday	1~8	word		2	R / W	■	
BE1	43042	Date of the 15th holiday (Month)	1~12	word	Month	2	R / W	■	
BE2	43043	Date of the 15th holiday (Day)	1~31	word	Day	2	R / W	■	
BE3	43044	Time table of the 15th holiday	1~8	word		2	R / W	■	
BE4	43045	Date of the 16th holiday (Month)	1~12	word	Month	2	R / W	■	
BE5	43046	Date of the 16th holiday (Day)	1~31	word	Day	2	R / W	■	
BE6	43047	Time table of the 16th holiday	1~8	word		2	R / W	■	
BE7	43048	Date of the 17th holiday (Month)	1~12	word	Month	2	R / W	■	
BE8	43049	Date of the 17th holiday (Day)	1~31	word	Day	2	R / W	■	
BE9	43050	Time table of the 17th holiday	1~8	word		2	R / W	■	
BEA	43051	Date of the 18th holiday (Month)	1~12	word	Month	2	R / W	■	
BEB	43052	Date of the 18th holiday (Day)	1~31	word	Day	2	R / W	■	
BEC	43053	Time table of the 18th holiday	1~8	word		2	R / W	■	
BED	43054	Date of the 19th holiday (Month)	1~12	word	Month	2	R / W	■	
BEE	43055	Date of the 19th holiday (Day)	1~31	word	Day	2	R / W	■	
BEF	43056	Time table of the 19th holiday	1~8	word		2	R / W	■	
BF0	43057	Date of the 20th holiday (Month)	1~12	word	Month	2	R / W	■	
BF1	43058	Date of the 20th holiday (Day)	1~31	word	Day	2	R / W	■	
BF2	43059	Time table of the 20th holiday	1~8	word		2	R / W	■	

BF3	43060	Setup of 1st year	2000~2099	word	Year	2	R / W	■	
BF4	43061	Number of holiday for the 1st year	0~20	word		2	R / W	■	
BF5	43062	Date of the 1st holiday (Month)	1~12	word	Month	2	R / W	■	
BF6	43063	Date of the 1st holiday (Day)	1~31	word	Day	2	R / W	■	
BF7	43064	Time table of the 1st holiday	1~8	word		2	R / W	■	
BF8	43065	Date of the 2nd holiday (Month)	1~12	word	Month	2	R / W	■	
BF9	43066	Date of the 2nd holiday (Day)	1~31	word	Day	2	R / W	■	
BFA	43067	Time table of the 2nd holiday	1~8	word		2	R / W	■	
BFB	43068	Date of the 3rd holiday (Month)	1~12	word	Month	2	R / W	■	
BFC	43069	Date of the 3rd holiday (Day)	1~31	word	Day	2	R / W	■	
BFD	43070	Time table of the 3rd holiday	1~8	word		2	R / W	■	
BFE	43071	Date of the 4th holiday (Month)	1~12	word	Month	2	R / W	■	
BFF	43072	Date of the 4th holiday (Day)	1~31	word	Day	2	R / W	■	
C00	43073	Time table of the 4th holiday	1~8	word		2	R / W	■	
C01	43074	Date of the 5th holiday (Month)	1~12	word	Month	2	R / W	■	
C02	43075	Date of the 5th holiday (Day)	1~31	word	Day	2	R / W	■	
C03	43076	Time table of the 5th holiday	1~8	word		2	R / W	■	
C04	43077	Date of the 6th holiday (Month)	1~12	word	Month	2	R / W	■	
C05	43078	Date of the 6th holiday (Day)	1~31	word	Day	2	R / W	■	
C06	43079	Time table of the 6th holiday	1~8	word		2	R / W	■	
C07	43080	Date of the 7th holiday (Month)	1~12	word	Month	2	R / W	■	
C08	43081	Date of the 7th holiday (Day)	1~31	word	Day	2	R / W	■	
C09	43082	Time table of the 7th holiday	1~8	word		2	R / W	■	
C0A	43083	Date of the 8th holiday (Month)	1~12	word	Month	2	R / W	■	
C0B	43084	Date of the 8th holiday (Day)	1~31	word	Day	2	R / W	■	
C0C	43085	Time table of the 8th holiday	1~8	word		2	R / W	■	
C0D	43086	Date of the 9th holiday (Month)	1~12	word	Month	2	R / W	■	
C0E	43087	Date of the 9th holiday (Day)	1~31	word	Day	2	R / W	■	
C0F	43088	Time table of the 9th holiday	1~8	word		2	R / W	■	
C10	43089	Date of the 10th holiday (Month)	1~12	word	Month	2	R / W	■	
C11	43090	Date of the 10th holiday (Day)	1~31	word	Day	2	R / W	■	
C12	43091	Time table of the 10th holiday	1~8	word		2	R / W	■	

C13	43092	Date of the 11th holiday (Month)	1~12	word	Month	2	R / W	■	
C14	43093	Date of the 11th holiday (Day)	1~31	word	Day	2	R / W	■	
C15	43094	Time table of the 11th holiday	1~8	word		2	R / W	■	
C16	43095	Date of the 12th holiday (Month)	1~12	word	Month	2	R / W	■	
C17	43096	Date of the 12th holiday (Day)	1~31	word	Day	2	R / W	■	
C18	43097	Time table of the 12th holiday	1~8	word		2	R / W	■	
C19	43098	Date of the 13th holiday (Month)	1~12	word	Month	2	R / W	■	
C1A	43099	Date of the 13th holiday (Day)	1~31	word	Day	2	R / W	■	
C1B	43100	Time table of the 13th holiday	1~8	word		2	R / W	■	
C1C	43101	Date of the 14th holiday (Month)	1~12	word	Month	2	R / W	■	
C1D	43102	Date of the 14th holiday (Day)	1~31	word	Day	2	R / W	■	
C1E	43103	Time table of the 14th holiday	1~8	word		2	R / W	■	
C1F	43104	Date of the 15th holiday (Month)	1~12	word	Month	2	R / W	■	
C20	43105	Date of the 15th holiday (Day)	1~31	word	Day	2	R / W	■	
C21	43106	Time table of the 15th holiday	1~8	word		2	R / W	■	
C22	43107	Date of the 16th holiday (Month)	1~12	word	Month	2	R / W	■	
C23	43108	Date of the 16th holiday (Day)	1~31	word	Day	2	R / W	■	
C24	43109	Time table of the 16th holiday	1~8	word		2	R / W	■	
C25	43110	Date of the 17th holiday (Month)	1~12	word	Month	2	R / W	■	
C26	43111	Date of the 17th holiday (Day)	1~31	word	Day	2	R / W	■	
C27	43112	Time table of the 17th holiday	1~8	word		2	R / W	■	
C28	43113	Date of the 18th holiday (Month)	1~12	word	Month	2	R / W	■	
C29	43114	Date of the 18th holiday (Day)	1~31	word	Day	2	R / W	■	
C2A	43115	Time table of the 18th holiday	1~8	word		2	R / W	■	
C2B	43116	Date of the 19th holiday (Month)	1~12	word	Month	2	R / W	■	
C2C	43117	Date of the 19th holiday (Day)	1~31	word	Day	2	R / W	■	
C2D	43118	Time table of the 19th holiday	1~8	word		2	R / W	■	
C2E	43119	Date of the 20th holiday (Month)	1~12	word	Month	2	R / W	■	
C2F	43120	Date of the 20th holiday (Day)	1~31	word	Day	2	R / W	■	
C30	43121	Time table of the 20th holiday	1~8	word		2	R / W	■	
C31	43122	Setup of 2nd year	2000~2099	word	Year	2	R / W	■	
C32	43123	Number of holiday for the 2nd year	0~20	word		2	R / W	■	

C33	43124	Date of the 1st holiday (Month)	1~12	word	Month	2	R / W	■	
C34	43125	Date of the 1st holiday (Day)	1~31	word	Day	2	R / W	■	
C35	43126	Time table of the 1st holiday	1~8	word		2	R / W	■	
C36	43127	Date of the 2nd holiday (Month)	1~12	word	Month	2	R / W	■	
C37	43128	Date of the 2nd holiday (Day)	1~31	word	Day	2	R / W	■	
C38	43129	Time table of the 2nd holiday	1~8	word		2	R / W	■	
C39	43130	Date of the 3rd holiday (Month)	1~12	word	Month	2	R / W	■	
C3A	43131	Date of the 3rd holiday (Day)	1~31	word	Day	2	R / W	■	
C3B	43132	Time table of the 3rd holiday	1~8	word		2	R / W	■	
C3C	43133	Date of the 4th holiday (Month)	1~12	word	Month	2	R / W	■	
C3D	43134	Date of the 4th holiday (Day)	1~31	word	Day	2	R / W	■	
C3E	43135	Time table of the 4th holiday	1~8	word		2	R / W	■	
C3F	43136	Date of the 5th holiday (Month)	1~12	word	Month	2	R / W	■	
C40	43137	Date of the 5th holiday (Day)	1~31	word	Day	2	R / W	■	
C41	43138	Time table of the 5th holiday	1~8	word		2	R / W	■	
C42	43139	Date of the 6th holiday (Month)	1~12	word	Month	2	R / W	■	
C43	43140	Date of the 6th holiday (Day)	1~31	word	Day	2	R / W	■	
C44	43141	Time table of the 6th holiday	1~8	word		2	R / W	■	
C45	43142	Date of the 7th holiday (Month)	1~12	word	Month	2	R / W	■	
C46	43143	Date of the 7th holiday (Day)	1~31	word	Day	2	R / W	■	
C47	43144	Time table of the 7th holiday	1~8	word		2	R / W	■	
C48	43145	Date of the 8th holiday (Month)	1~12	word	Month	2	R / W	■	
C49	43146	Date of the 8th holiday (Day)	1~31	word	Day	2	R / W	■	
C4A	43147	Time table of the 8th holiday	1~8	word		2	R / W	■	
C4B	43148	Date of the 9th holiday (Month)	1~12	word	Month	2	R / W	■	
C4C	43149	Date of the 9th holiday (Day)	1~31	word	Day	2	R / W	■	
C4D	43150	Time table of the 9th holiday	1~8	word		2	R / W	■	
C4E	43151	Date of the 10th holiday (Month)	1~12	word	Month	2	R / W	■	
C4F	43152	Date of the 10th holiday (Day)	1~31	word	Day	2	R / W	■	
C50	43153	Time table of the 10th holiday	1~8	word		2	R / W	■	
C51	43154	Date of the 11th holiday (Month)	1~12	word	Month	2	R / W	■	
C52	43155	Date of the 11th holiday (Day)	1~31	word	Day	2	R / W	■	

C53	43156	Time table of the 11th holiday	1~8	word		2	R / W	■	
C54	43157	Date of the 12th holiday (Month)	1~12	word	Month	2	R / W	■	
C55	43158	Date of the 12th holiday (Day)	1~31	word	Day	2	R / W	■	
C56	43159	Time table of the 12th holiday	1~8	word		2	R / W	■	
C57	43160	Date of the 13th holiday (Month)	1~12	word	Month	2	R / W	■	
C58	43161	Date of the 13th holiday (Day)	1~31	word	Day	2	R / W	■	
C59	43162	Time table of the 13th holiday	1~8	word		2	R / W	■	
C5A	43163	Date of the 14th holiday (Month)	1~12	word	Month	2	R / W	■	
C5B	43164	Date of the 14th holiday (Day)	1~31	word	Day	2	R / W	■	
C5C	43165	Time table of the 14th holiday	1~8	word		2	R / W	■	
C5D	43166	Date of the 15th holiday (Month)	1~12	word	Month	2	R / W	■	
C5E	43167	Date of the 15th holiday (Day)	1~31	word	Day	2	R / W	■	
C5F	43168	Time table of the 15th holiday	1~8	word		2	R / W	■	
C60	43169	Date of the 16th holiday (Month)	1~12	word	Month	2	R / W	■	
C61	43170	Date of the 16th holiday (Day)	1~31	word	Day	2	R / W	■	
C62	43171	Time table of the 16th holiday	1~8	word		2	R / W	■	
C63	43172	Date of the 17th holiday (Month)	1~12	word	Month	2	R / W	■	
C64	43173	Date of the 17th holiday (Day)	1~31	word	Day	2	R / W	■	
C65	43174	Time table of the 17th holiday	1~8	word		2	R / W	■	
C66	43175	Date of the 18th holiday (Month)	1~12	word	Month	2	R / W	■	
C67	43176	Date of the 18th holiday (Day)	1~31	word	Day	2	R / W	■	
C68	43177	Time table of the 18th holiday	1~8	word		2	R / W	■	
C69	43178	Date of the 19th holiday (Month)	1~12	word	Month	2	R / W	■	
C6A	43179	Date of the 19th holiday (Day)	1~31	word	Day	2	R / W	■	
C6B	43180	Time table of the 19th holiday	1~8	word		2	R / W	■	
C6C	43181	Date of the 20th holiday (Month)	1~12	word	Month	2	R / W	■	
C6D	43182	Date of the 20th holiday (Day)	1~31	word	Day	2	R / W	■	
C6E	43183	Time table of the 20th holiday	1~8	word		2	R / W	■	
C6F	43184	Setup of 3rd year	2000~2099	word	Year	2	R / W	■	
C70	43185	Number of holiday for the 3rd year	0~20	word		2	R / W	■	
C71	43186	Date of the 1st holiday (Month)	1~12	word	Month	2	R / W	■	
C72	43187	Date of the 1st holiday (Day)	1~31	word	Day	2	R / W	■	

C73	43188	Time table of the 1st holiday	1~8	word		2	R / W	■	
C74	43189	Date of the 2nd holiday (Month)	1~12	word	Month	2	R / W	■	
C75	43190	Date of the 2nd holiday (Day)	1~31	word	Day	2	R / W	■	
C76	43191	Time table of the 2nd holiday	1~8	word		2	R / W	■	
C77	43192	Date of the 3rd holiday (Month)	1~12	word	Month	2	R / W	■	
C78	43193	Date of the 3rd holiday (Day)	1~31	word	Day	2	R / W	■	
C79	43194	Time table of the 3rd holiday	1~8	word		2	R / W	■	
C7A	43195	Date of the 4th holiday (Month)	1~12	word	Month	2	R / W	■	
C7B	43196	Date of the 4th holiday (Day)	1~31	word	Day	2	R / W	■	
C7C	43197	Time table of the 4th holiday	1~8	word		2	R / W	■	
C7D	43198	Date of the 5th holiday (Month)	1~12	word	Month	2	R / W	■	
C7E	43199	Date of the 5th holiday (Day)	1~31	word	Day	2	R / W	■	
C7F	43200	Time table of the 5th holiday	1~8	word		2	R / W	■	
C80	43201	Date of the 6th holiday (Month)	1~12	word	Month	2	R / W	■	
C81	43202	Date of the 6th holiday (Day)	1~31	word	Day	2	R / W	■	
C82	43203	Time table of the 6th holiday	1~8	word		2	R / W	■	
C83	43204	Date of the 7th holiday (Month)	1~12	word	Month	2	R / W	■	
C84	43205	Date of the 7th holiday (Day)	1~31	word	Day	2	R / W	■	
C85	43206	Time table of the 7th holiday	1~8	word		2	R / W	■	
C86	43207	Date of the 8th holiday (Month)	1~12	word	Month	2	R / W	■	
C87	43208	Date of the 8th holiday (Day)	1~31	word	Day	2	R / W	■	
C88	43209	Time table of the 8th holiday	1~8	word		2	R / W	■	
C89	43210	Date of the 9th holiday (Month)	1~12	word	Month	2	R / W	■	
C8A	43211	Date of the 9th holiday (Day)	1~31	word	Day	2	R / W	■	
C8B	43212	Time table of the 9th holiday	1~8	word		2	R / W	■	
C8C	43213	Date of the 10th holiday (Month)	1~12	word	Month	2	R / W	■	
C8D	43214	Date of the 10th holiday (Day)	1~31	word	Day	2	R / W	■	
C8E	43215	Time table of the 10th holiday	1~8	word		2	R / W	■	
C8F	43216	Date of the 11th holiday (Month)	1~12	word	Month	2	R / W	■	
C90	43217	Date of the 11th holiday (Day)	1~31	word	Day	2	R / W	■	
C91	43218	Time table of the 11th holiday	1~8	word		2	R / W	■	
C92	43219	Date of the 12th holiday (Month)	1~12	word	Month	2	R / W	■	

C93	43220	Date of the 12th holiday (Day)	1~31	word	Day	2	R / W	■	
C94	43221	Time table of the 12th holiday	1~8	word		2	R / W	■	
C95	43222	Date of the 13th holiday (Month)	1~12	word	Month	2	R / W	■	
C96	43223	Date of the 13th holiday (Day)	1~31	word	Day	2	R / W	■	
C97	43224	Time table of the 13th holiday	1~8	word		2	R / W	■	
C98	43225	Date of the 14th holiday (Month)	1~12	word	Month	2	R / W	■	
C99	43226	Date of the 14th holiday (Day)	1~31	word	Day	2	R / W	■	
C9A	43227	Time table of the 14th holiday	1~8	word		2	R / W	■	
C9B	43228	Date of the 15th holiday (Month)	1~12	word	Month	2	R / W	■	
C9C	43229	Date of the 15th holiday (Day)	1~31	word	Day	2	R / W	■	
C9D	43230	Time table of the 15th holiday	1~8	word		2	R / W	■	
C9E	43231	Date of the 16th holiday (Month)	1~12	word	Month	2	R / W	■	
C9F	43232	Date of the 16th holiday (Day)	1~31	word	Day	2	R / W	■	
CA0	43233	Time table of the 16th holiday	1~8	word		2	R / W	■	
CA1	43234	Date of the 17th holiday (Month)	1~12	word	Month	2	R / W	■	
CA2	43235	Date of the 17th holiday (Day)	1~31	word	Day	2	R / W	■	
CA3	43236	Time table of the 17th holiday	1~8	word		2	R / W	■	
CA4	43237	Date of the 18th holiday (Month)	1~12	word	Month	2	R / W	■	
CA5	43238	Date of the 18th holiday (Day)	1~31	word	Day	2	R / W	■	
CA6	43239	Time table of the 18th holiday	1~8	word		2	R / W	■	
CA7	43240	Date of the 19th holiday (Month)	1~12	word	Month	2	R / W	■	
CA8	43241	Date of the 19th holiday (Day)	1~31	word	Day	2	R / W	■	
CA9	43242	Time table of the 19th holiday	1~8	word		2	R / W	■	
CAA	43243	Date of the 20th holiday (Month)	1~12	word	Month	2	R / W	■	
CAB	43244	Date of the 20th holiday (Day)	1~31	word	Day	2	R / W	■	
CAC	43245	Time table of the 20th holiday	1~8	word		2	R / W	■	
CAD	43246	Setup of 4th year	2000~2099	word	Year	2	R / W	■	
CAE	43247	Number of holiday for the 4th year	0~20	word		2	R / W	■	
CAF	43248	Date of the 1st holiday (Month)	1~12	word	Month	2	R / W	■	
CB0	43249	Date of the 1st holiday (Day)	1~31	word	Day	2	R / W	■	
CB1	43250	Time table of the 1st holiday	1~8	word		2	R / W	■	
CB2	43251	Date of the 2nd holiday (Month)	1~12	word	Month	2	R / W	■	

CB3	43252	Date of the 2nd holiday (Day)	1~31	word	Day	2	R / W	■	
CB4	43253	Time table of the 2nd holiday	1~8	word		2	R / W	■	
CB5	43254	Date of the 3rd holiday (Month)	1~12	word	Month	2	R / W	■	
CB6	43255	Date of the 3rd holiday (Day)	1~31	word	Day	2	R / W	■	
CB7	43256	Time table of the 3rd holiday	1~8	word		2	R / W	■	
CB8	43257	Date of the 4th holiday (Month)	1~12	word	Month	2	R / W	■	
CB9	43258	Date of the 4th holiday (Day)	1~31	word	Day	2	R / W	■	
CBA	43259	Time table of the 4th holiday	1~8	word		2	R / W	■	
CBB	43260	Date of the 5th holiday (Month)	1~12	word	Month	2	R / W	■	
CBC	43261	Date of the 5th holiday (Day)	1~31	word	Day	2	R / W	■	
CBD	43262	Time table of the 5th holiday	1~8	word		2	R / W	■	
CBE	43263	Date of the 6th holiday (Month)	1~12	word	Month	2	R / W	■	
CBF	43264	Date of the 6th holiday (Day)	1~31	word	Day	2	R / W	■	
CC0	43265	Time table of the 6th holiday	1~8	word		2	R / W	■	
CC1	43266	Date of the 7th holiday (Month)	1~12	word	Month	2	R / W	■	
CC2	43267	Date of the 7th holiday (Day)	1~31	word	Day	2	R / W	■	
CC3	43268	Time table of the 7th holiday	1~8	word		2	R / W	■	
CC4	43269	Date of the 8th holiday (Month)	1~12	word	Month	2	R / W	■	
CC5	43270	Date of the 8th holiday (Day)	1~31	word	Day	2	R / W	■	
CC6	43271	Time table of the 8th holiday	1~8	word		2	R / W	■	
CC7	43272	Date of the 9th holiday (Month)	1~12	word	Month	2	R / W	■	
CC8	43273	Date of the 9th holiday (Day)	1~31	word	Day	2	R / W	■	
CC9	43274	Time table of the 9th holiday	1~8	word		2	R / W	■	
CCA	43275	Date of the 10th holiday (Month)	1~12	word	Month	2	R / W	■	
CCB	43276	Date of the 10th holiday (Day)	1~31	word	Day	2	R / W	■	
CCC	43277	Time table of the 10th holiday	1~8	word		2	R / W	■	
CCD	43278	Date of the 11th holiday (Month)	1~12	word	Month	2	R / W	■	
CCE	43279	Date of the 11th holiday (Day)	1~31	word	Day	2	R / W	■	
CCF	43280	Time table of the 11th holiday	1~8	word		2	R / W	■	
CD0	43281	Date of the 12th holiday (Month)	1~12	word	Month	2	R / W	■	
CD1	43282	Date of the 12th holiday (Day)	1~31	word	Day	2	R / W	■	
CD2	43283	Time table of the 12th holiday	1~8	word		2	R / W	■	

CD3	43284	Date of the 13th holiday (Month)	1~12	word	Month	2	R / W	■	
CD4	43285	Date of the 13th holiday (Day)	1~31	word	Day	2	R / W	■	
CD5	43286	Time table of the 13th holiday	1~8	word		2	R / W	■	
CD6	43287	Date of the 14th holiday (Month)	1~12	word	Month	2	R / W	■	
CD7	43288	Date of the 14th holiday (Day)	1~31	word	Day	2	R / W	■	
CD8	43289	Time table of the 14th holiday	1~8	word		2	R / W	■	
CD9	43290	Date of the 15th holiday (Month)	1~12	word	Month	2	R / W	■	
CDA	43291	Date of the 15th holiday (Day)	1~31	word	Day	2	R / W	■	
CDB	43292	Time table of the 15th holiday	1~8	word		2	R / W	■	
CDC	43293	Date of the 16th holiday (Month)	1~12	word	Month	2	R / W	■	
CDD	43294	Date of the 16th holiday (Day)	1~31	word	Day	2	R / W	■	
CDE	43295	Time table of the 16th holiday	1~8	word		2	R / W	■	
CDF	43296	Date of the 17th holiday (Month)	1~12	word	Month	2	R / W	■	
CE0	43297	Date of the 17th holiday (Day)	1~31	word	Day	2	R / W	■	
CE1	43298	Time table of the 17th holiday	1~8	word		2	R / W	■	
CE2	43299	Date of the 18th holiday (Month)	1~12	word	Month	2	R / W	■	
CE3	43300	Date of the 18th holiday (Day)	1~31	word	Day	2	R / W	■	
CE4	43301	Time table of the 18th holiday	1~8	word		2	R / W	■	
CE5	43302	Date of the 19th holiday (Month)	1~12	word	Month	2	R / W	■	
CE6	43303	Date of the 19th holiday (Day)	1~31	word	Day	2	R / W	■	
CE7	43304	Time table of the 19th holiday	1~8	word		2	R / W	■	
CE8	43305	Date of the 20th holiday (Month)	1~12	word	Month	2	R / W	■	
CE9	43306	Date of the 20th holiday (Day)	1~31	word	Day	2	R / W	■	
CEA	43307	Time table of the 20th holiday	1~8	word		2	R / W	■	
CEB	43308	Setup of 5th year	2000~2099	word	Year	2	R / W	■	
CEC	43309	Number of holiday for the 5th year	0~20	word		2	R / W	■	
CED	43310	Date of the 1st holiday (Month)	1~12	word	Month	2	R / W	■	
CEE	43311	Date of the 1st holiday (Day)	1~31	word	Day	2	R / W	■	
CEF	43312	Time table of the 1st holiday	1~8	word		2	R / W	■	
CF0	43313	Date of the 2nd holiday (Month)	1~12	word	Month	2	R / W	■	
CF1	43314	Date of the 2nd holiday (Day)	1~31	word	Day	2	R / W	■	
CF2	43315	Time table of the 2nd holiday	1~8	word		2	R / W	■	

CF3	43316	Date of the 3rd holiday (Month)	1~12	word	Month	2	R / W	■	
CF4	43317	Date of the 3rd holiday (Day)	1~31	word	Day	2	R / W	■	
CF5	43318	Time table of the 3rd holiday	1~8	word		2	R / W	■	
CF6	43319	Date of the 4th holiday (Month)	1~12	word	Month	2	R / W	■	
CF7	43320	Date of the 4th holiday (Day)	1~31	word	Day	2	R / W	■	
CF8	43321	Time table of the 4th holiday	1~8	word		2	R / W	■	
CF9	43322	Date of the 5th holiday (Month)	1~12	word	Month	2	R / W	■	
CFA	43323	Date of the 5th holiday (Day)	1~31	word	Day	2	R / W	■	
CFB	43324	Time table of the 5th holiday	1~8	word		2	R / W	■	
CFC	43325	Date of the 6th holiday (Month)	1~12	word	Month	2	R / W	■	
CFD	43326	Date of the 6th holiday (Day)	1~31	word	Day	2	R / W	■	
CFE	43327	Time table of the 6th holiday	1~8	word		2	R / W	■	
CFF	43328	Date of the 7th holiday (Month)	1~12	word	Month	2	R / W	■	
D00	43329	Date of the 7th holiday (Day)	1~31	word	Day	2	R / W	■	
D01	43330	Time table of the 7th holiday	1~8	word		2	R / W	■	
D02	43331	Date of the 8th holiday (Month)	1~12	word	Month	2	R / W	■	
D03	43332	Date of the 8th holiday (Day)	1~31	word	Day	2	R / W	■	
D04	43333	Time table of the 8th holiday	1~8	word		2	R / W	■	
D05	43334	Date of the 9th holiday (Month)	1~12	word	Month	2	R / W	■	
D06	43335	Date of the 9th holiday (Day)	1~31	word	Day	2	R / W	■	
D07	43336	Time table of the 9th holiday	1~8	word		2	R / W	■	
D08	43337	Date of the 10th holiday (Month)	1~12	word	Month	2	R / W	■	
D09	43338	Date of the 10th holiday (Day)	1~31	word	Day	2	R / W	■	
D0A	43339	Time table of the 10th holiday	1~8	word		2	R / W	■	
D0B	43340	Date of the 11th holiday (Month)	1~12	word	Month	2	R / W	■	
D0C	43341	Date of the 11th holiday (Day)	1~31	word	Day	2	R / W	■	
D0D	43342	Time table of the 11th holiday	1~8	word		2	R / W	■	
D0E	43343	Date of the 12th holiday (Month)	1~12	word	Month	2	R / W	■	
D0F	43344	Date of the 12th holiday (Day)	1~31	word	Day	2	R / W	■	
D10	43345	Time table of the 12th holiday	1~8	word		2	R / W	■	
D11	43346	Date of the 13th holiday (Month)	1~12	word	Month	2	R / W	■	
D12	43347	Date of the 13th holiday (Day)	1~31	word	Day	2	R / W	■	

D13	43348	Time table of the 13th holiday	1~8	word		2	R / W	■	
D14	43349	Date of the 14th holiday (Month)	1~12	word	Month	2	R / W	■	
D15	43350	Date of the 14th holiday (Day)	1~31	word	Day	2	R / W	■	
D16	43351	Time table of the 14th holiday	1~8	word		2	R / W	■	
D17	43352	Date of the 15th holiday (Month)	1~12	word	Month	2	R / W	■	
D18	43353	Date of the 15th holiday (Day)	1~31	word	Day	2	R / W	■	
D19	43354	Time table of the 15th holiday	1~8	word		2	R / W	■	
D1A	43355	Date of the 16th holiday (Month)	1~12	word	Month	2	R / W	■	
D1B	43356	Date of the 16th holiday (Day)	1~31	word	Day	2	R / W	■	
D1C	43357	Time table of the 16th holiday	1~8	word		2	R / W	■	
D1D	43358	Date of the 17th holiday (Month)	1~12	word	Month	2	R / W	■	
D1E	43359	Date of the 17th holiday (Day)	1~31	word	Day	2	R / W	■	
D1F	43360	Time table of the 17th holiday	1~8	word		2	R / W	■	
D20	43361	Date of the 18th holiday (Month)	1~12	word	Month	2	R / W	■	
D21	43362	Date of the 18th holiday (Day)	1~31	word	Day	2	R / W	■	
D22	43363	Time table of the 18th holiday	1~8	word		2	R / W	■	
D23	43364	Date of the 19th holiday (Month)	1~12	word	Month	2	R / W	■	
D24	43365	Date of the 19th holiday (Day)	1~31	word	Day	2	R / W	■	
D25	43366	Time table of the 19th holiday	1~8	word		2	R / W	■	
D26	43367	Date of the 20th holiday (Month)	1~12	word	Month	2	R / W	■	
D27	43368	Date of the 20th holiday (Day)	1~31	word	Day	2	R / W	■	
D28	43369	Time table of the 20th holiday	1~8	word		2	R / W	■	
13. Other Max/Min values:0E00 ~ 0ECB									
E00	43585	Max active power A	-999,999,999~999,999,999	Float	W	4	R	■	
E01	43586								
E02	43587	Date of max active power A	Year:00~99 (high byte)	byte	Year-Month	2	R	■	
E03	43588		Month:1~12 (low byte)						
E04	43589		Day:1~31						
E05	43590	Time of max active power A	Hour:00~23 (high byte)	byte	Hour-Minute	2	R	■	
E06	43591		Minute:00~59 (low byte)						
E07	43592	Min active power A	-999,999,999~999,999,999	Float	W	4	R	■	
E08	43593								
			Month:1~12 (low byte)						

E09	43594		Day:1~31	word	Day	2	R	■	
E0A	43595	Time of min active power A	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E0B	43596		Second:00~59	word	Second	2	R	■	
E0C	43597	Max active power B	-999,999,999~999,999,999	Float	W	4	R	■	
E0D	43598								
E0E	43599	Date of max active power B	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E0F	43600		Day:1~31	word	Day	2	R	■	
E10	43601	Time of max active power B	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E11	43602		Second:00~59	word	Second	2	R	■	
E12	43603	Min active power B	-999,999,999~999,999,999	Float	W	4	R	■	
E13	43604								
E14	43605	Date of min active power B	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E15	43606		Day:1~31	word	Day	2	R	■	
E16	43607	Time of min active power B	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E17	43608		Second:00~59	word	Second	2	R	■	
E18	43609	Max active power C	-999,999,999~999,999,999	Float	W	4	R	■	
E19	43610								
E1A	43611	Date of max active power C	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E1B	43612		Day:1~31	word	Day	2	R	■	
E1C	43613	Time of max active power C	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E1D	43614		Second:00~59	word	Second	2	R	■	
E1E	43615	Min active power C	-999,999,999~999,999,999	Float	W	4	R	■	
E1F	43616								
E20	43617	Date of min active power C	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E21	43618		Day:1~31	word	Day	2	R	■	
E22	43619	Time of min active power C	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E23	43620		Second:00~59	word	Second	2	R	■	
E24	43621	Max reactive power A	-999,999,999~999,999,999	Float	VAR	4	R	■	
E25	43622								
E26	43623	Date of max reactive power A	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E27	43624		Day:1~31	word	Day	2	R	■	
E28	43625	Time of max reactive power A	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	

E29	43626		Second:00~59	word	Second	2	R	■	
E2A	43627	Min reactive power A	-999,999,999~999,999,999	Float	VAR	4	R	■	
E2B	43628								
E2C	43629	Date of min reactive power A	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E2D	43630		Day:1~31	word	Day	2	R	■	
E2E	43631	Time of min reactive power A	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E2F	43632		Second:00~59	word	Second	2	R	■	
E30	43633	Max reactive power B	-999,999,999~999,999,999	Float	VAR	4	R	■	
E31	43634								
E32	43635	Date of min reactive power B	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E33	43636		Day:1~31	word	Day	2	R	■	
E34	43637	Time of max reactive power B	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E35	43638		Second:00~59	word	Second	2	R	■	
E36	43639	Min reactive power B	-999,999,999~999,999,999	Float	VAR	4	R	■	
E37	43640								
E38	43641	Date of min reactive power B	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E39	43642		Day:1~31	word	Day	2	R	■	
E3A	43643	Time of min reactive power B	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E3B	43644		Second:00~59	word	Second	2	R	■	
E3C	43645	Max reactive power C	-999,999,999~999,999,999	Float	VAR	4	R	■	
E3D	43646								
E3E	43647	Date of max reactive power C	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E3F	43648		Day:1~31	word	Day	2	R	■	
E40	43649	Time of max reactive power C	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E41	43650		Second:00~59	word	Second	2	R	■	
E42	43651	Min reactive power C	-999,999,999~999,999,999	Float	VAR	4	R	■	
E43	43652								
E44	43653	Date of min reactive power C	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E45	43654		Day:1~31	word	Day	2	R	■	
E46	43655	Time of min reactive power C	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E47	43656		Second:00~59	word	Second	2	R	■	
E48	43657	Max apparent power A	0~999,999,999	Float	VA	4	R	■	

E49	43658								
E4A	43659	Date of max apparent power A	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E4B	43660		Day:1~31	word	Day	2	R	■	
E4C	43661	Time of max apparent power A	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E4D	43662		Second:00~59	word	Second	2	R	■	
E4E	43663	Min apparent power A	0~999,999,999	Float	VA	4	R	■	
E4F	43664								
E50	43665	Date of min apparent power A	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E51	43666		Day:1~31	word	Day	2	R	■	
E52	43667	Time of min apparent power A	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E53	43668		Second:00~59	word	Second	2	R	■	
E54	43669	Max apparent power B	0~999,999,999	Float	VA	4	R	■	
E55	43670								
E56	43671	Date of max apparent power B	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E57	43672		Day:1~31	word	Day	2	R	■	
E58	43673	Time of max apparent power B	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E59	43674		Second:00~59	word	Second	2	R	■	
E5A	43675	Min apparent power B	0~999,999,999	Float	VA	4	R	■	
E5B	43676								
E5C	43677	Date of min apparent power B	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E5D	43678		Day:1~31	word	Day	2	R	■	
E5E	43679	Time of min apparent power B	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E5F	43680		Second:00~59	word	Second	2	R	■	
E60	43681	Max apparent power C	0~999,999,999	Float	VA	4	R	■	
E61	43682								
E62	43683	Date of max apparent power C	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E63	43684		Day:1~31	word	Day	2	R	■	
E64	43685	Time of min apparent power C	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E65	43686		Second:00~59	word	Second	2	R	■	
E66	43687	Min apparent power C	0~999,999,999	Float	VA	4	R	■	
E67	43688								
E68	43689	Date of min apparent power C	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	

E69	43690		Day:1~31	word	Day	2	R	■	
E6A	43691	Time of min apparent power C	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E6B	43692		Second:00~59	word	Second	2	R	■	
E6C	43693	Max active power factor A	-1.000 ~ 1.000 (+:Lag \ -:Advancing)	Float		4	R	■	
E6D	43694								
E6E	43695	Date of max active power factor A	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E6F	43696		Day:1~31	word	Day	2	R	■	
E70	43697	Time of max active power factor A	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E71	43698		Second:00~59	word	Second	2	R	■	
E72	43699	Min active power factor A	-1.000 ~ 1.000 (+:Lag \ -:Advancing)	Float		4	R	■	
E73	43700								
E74	43701	Date of min active power factor A	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E75	43702		Day:1~31	word	Day	2	R	■	
E76	43703	Time of min active power factor A	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E77	43704		Second:00~59	word	Second	2	R	■	
E78	43705	Max active power factor B	-1.000 ~ 1.000 (+:Lag \ -:Advancing)	Float		4	R	■	
E79	43706								
E7A	43707	Date of max active power factor B	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E7B	43708		Day:1~31	word	Day	2	R	■	
E7C	43709	Time of max active power factor B	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E7D	43710		Second:00~59	word	Second	2	R	■	
E7E	43711	Min active power factor B	-1.000 ~ 1.000 (+:Lag \ -:Advancing)	Float		4	R	■	
E7F	43712								
E80	43713	Date of min active power factor B	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E81	43714		Day:1~31	word	Day	2	R	■	
E82	43715	Time of min active power factor B	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E83	43716		Second:00~59	word	Second	2	R	■	
E84	43717	Max active power factor C	-1.000 ~ 1.000 (+:Lag \ -:Advancing)	Float		4	R	■	
E85	43718								
E86	43719	Date of max active power factor C	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E87	43720		Day:1~31	word	Day	2	R	■	
E88	43721	Time of max active power factor C	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	

E89	43722		Second:00~59	word	Second	2	R	■	
E8A	43723	Min active power factor C	-1.000 ~ 1.000 (+:Lag \ -:Advancing)	Float		4	R	■	
E8B	43724								
E8C	43725	Date of min active power factor C	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E8D	43726		Day:1~31	word	Day	2	R	■	
E8E	43727	Time of min active power factor C	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E8F	43728		Second:00~59	word	Second	2	R	■	
E90	43729	Max active power total demand	-999,999,999~999,999,999	Float	W	4	R	■	
E91	43730								
E92	43731	Date of max active power total demand	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E93	43732		Day:1~31	word	Day	2	R	■	
E94	43733	Time of max active power total demand	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E95	43734		Second:00~59	word	Second	2	R	■	
E96	43735	Min active power total demand	-999,999,999~999,999,999	Float	W	4	R	■	
E97	43736								
E98	43737	Date of min active power total demand	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E99	43738		Day:1~31	word	Day	2	R	■	
E9A	43739	Time of min active power total demand	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
E9B	43740		Second:00~59	word	Second	2	R	■	
E9C	43741	Max reactive power total demand	-999,999,999~999,999,999	Float	VAR	4	R	■	
E9D	43742								
E9E	43743	Date of max reactive power total demand	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
E9F	43744		Day:1~31	word	Day	2	R	■	
EA0	43745	Time of max reactive power total demand	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
EA1	43746		Second:00~59	word	Second	2	R	■	
EA2	43747	Min reactive power total demand	-999,999,999~999,999,999	Float	VAR	4	R	■	
EA3	43748								
EA4	43749	Date of min reactive power total demand	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
EA5	43750		Day:1~31	word	Day	2	R	■	
EA6	43751	Time of min reactive power total demand	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
EA7	43752		Second:00~59	word	Second	2	R	■	
EA8	43753	Max apparent power	0~999,999,999	Float	VA	4	R	■	

EA9	43754	demand							
EAA	43755	Date of max apparent power demand	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
EAB	43756		Day:1~31	word	Day	2	R	■	
EAC	43757	Time of max apparent power demand	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
EAD	43758		Second:00~59	word	Second	2	R	■	
EAE	43759	Min apparent power demand	0~999,999,999	Float	VA	4	R	■	
EAF	43760								
EB0	43761	Date of min apparent power demand	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
EB1	43762		Day:1~31	word	Day	2	R	■	
EB2	43763	Time of min apparent power demand	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
EB3	43764		Second:00~59	word	Second	2	R	■	
EB4	43765	Max current A demand	0.000~9999.000	Float	A	4	R	■	
EB5	43766								
EB6	43767	Date of max current A demand	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
EB7	43768		Day:1~31	word	Day	2	R	■	
EB8	43769	Time of max current A demand	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
EB9	43770		Second:00~59	word	Second	2	R	■	
EBA	43771	Max current B demand	0.000~9999.000	Float	A	4	R	■	
EBB	43772								
EBC	43773	Date of max current B demand	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
EBD	43774		Day:1~31	word	Day	2	R	■	
EBE	43775	Time of max current B demand	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
EBF	43776		Second:00~59	word	Second	2	R	■	
EC0	43777	Max current C demand	0.000~9999.000	Float	A	4	R	■	
EC1	43778								
EC2	43779	Date of max current C demand	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	
EC3	43780		Day:1~31	word	Day	2	R	■	
EC4	43781	Time of max current C demand	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
EC5	43782		Second:00~59	word	Second	2	R	■	
EC6	43783	Max current average demand	0.000~9999.000	Float	A	4	R	■	
EC7	43784								
EC8	43785	Date of max current average demand	Year:00~99 (high byte) Month:1~12 (low byte)	byte	Year-Month	2	R	■	

EC9	43786		Day:1~31	word	Day	2	R	■	
ECA	43787	Time of max current average demand	Hour:00~23 (high byte) Minute:00~59 (low byte)	byte	Hour-Minute	2	R	■	
ECB	43788		Second:00~59	word	Second	2	R	■	

Chapter 6 Messages of Abnormal Operations

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6.1 Common Malfunction Analysis

6.1.1 Power Meter Fails after Being Electrified

- Make sure voltage and other wiring is correct, voltage should be in the functional range.
- Turn off the meter and then turn it on.

6.1.2 Voltage or Current Reading is Incorrect

- Check that the wiring mode settings match the actual wiring mode.
- Check that the voltage transformer (PT), current transformer (CT) variable ratio is set correctly. °
- Check that the GND is correctly grounded
- Check that the voltage transformer (PT) and current transformer (CT) are intact.

6.1.3 Upon Correct Reading of Voltage and Current, Power or Power Factor Reading is Incorrect

- Compare voltage and current inputs to the actual wiring and wiring diagrams and check the phase relationship is correct.

6.1.4 RS-485 Communication is Unusual

- Check that the communication string transfer rate, ID, and communication protocol settings of the upper machine are consistent with the meter.
- Please check the data bits, stop bits and parity bits that the settings are consistent with the master computer.
- Check if RS-485 converter is working.
- Check the entire communication wiring for problems (short circuit \ broken circuit \ ground \ cover wire for correct single-end ground, etc) °
- Turn off power meter and master computer, then restart it.
- If the communication line is long, it is recommended to parallel a matching resistance of about 120 ohms at the end of the communication line.