

# Solar Inverters Product Catalogue

Solar inverters, monitoring and support for residential / commercial installations and power plants





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## About us



















At Delta Energy Systems, we believe that much more than just good products are needed to maximise your energy efficiency. The key to our continued success is how well we understand the demands and needs of our customers – day after day, year after year.

We have been partners with some of the largest hightech companies in the world for more than 40 years. Our power solutions have contributed to the success of much of our partners' ground breaking technology and have helped them to stay ahead in a rapidly changing world.

Together with our customers, we offer innovative nextgeneration solutions for the efficient use of solar energy that work today and already prepare your solar system for future upgrade requirements. The Delta Group is an international high-tech company with more than 80,000 employees worldwide and a turn-over of 7 billion USD.

Since 1999, Delta Energy Systems (Germany) – a subsidiary of the Delta Group – has invested in research and development in the solar inverter program in Germany.

When it comes to energy, we believe partnership is the real power.

## The Delta Advantage





## Strong and reliable company with local presence

- Experienced contact partners in your area and in your language
- Knowledge of the local grid access conditions

## Highly reliable products with extensive testing and continuous improvement

- Extensively tested products in extreme conditions
- Robust electronics and die-cast aluminum chassis
- IP65 protection class for outdoor installation





## Extensive support for sales partners, installers, and plant operators

- Delta Solar Team offers inverter training courses which can be run on your premises upon request
- Dedicated Solar Support Hotline which is there when you need help

## Solar inverters with exceptional power density and advanced features

- The inverters in the new RPI series are characterized by a high power density, the M50A has one of the highest in the 50 kVA inverter class
- Delta inverters provide robust and reliable technology and high quality

## Delta solar inverters

Delta offers a complete product range of solar inverters, accessories and services to our partners and installers and the best photovoltaic systems to maximise profit.

Delta solar inverters are multifaceted and can be used in every system size as well as are compatible with all commercially available solar modules and system components. Delta solar inverters are not only the heart of your system, but also the intelligent control equipment of your power generation in conjunction with the Delta monitoring system.

Our Solar Team is always available to support you. We would be happy to assist you in the planning of your installations.

### Versatile applications



Delta string inverters can be used with all commercially available photovoltaic modules. Even solar panels that require the solar generator to be grounded at the posi-

tive or negative pole can be easily used with SOLIVIA TR inverters. The wide input voltage range of Delta inverters offers maximum flexibility for system installation.

### Maximum profitability



Delta solar inverters achieve a peak efficiency of up to 98.6 % and offer one of the largest operating temperature ranges available. Full output up to 55 °C ambient tempera-

ture to maximise energy efficiency and ensure maximum profitability.

### Aluminium housing



The aluminium housing of the Delta solar inverters ensure long lasting protection against moisture and corrosion. The dust-proof, completely shockproof housing pro-

tects the electronics of the solar inverter from water spray from all directions. This means that it can be installed in protected outdoor areas, damp basements and areas with a high level of dust (agriculture).

## Maximum flexibility



The international software integrated in each inverter allows the units to be installed in many European countries. The user can select the appropriate preconfigured country

settings in the software to connect the installed inverter to the grid of the local region. RPI and TL-series inverters have 2 MPP trackers, and a wide input voltage range, which gives them maximum flexibility in string sizing.

### Easy installation



The lightweight, compact design combined with the unique wall bracket makes installation of the solar inverters greatly simplified. All inverters ship standard with a mounting

bracket and AC plug to allow quick installation right out of the box.

## Long lifetime



Delta inverters have a very long lifetime thanks to the durable aluminum housing and high quality robust electronics that are employed in their design. Continuous

product improvement is ensured due to comprehensive testing during product development and in production.



Reference installation in Lauchhammer (Germany): 3.83 MW nominal output power - 15,968 solar modules - 135 Delta string inverters

# Solar inverters for residential / small commercial installations





The solar inverters with power outputs from 2 kVA up to 12 kVA are the perfect choice for PV solar systems for a single or multi-family house or for small commercial systems.

Delta inverters are the ideal solution for private homeowners. The RPI M6A/M8A/M10A and SOLIVIA 2.0 ... 5.0 TR-series inverters are fanless and therefore fairly quiet. The quality aluminium housing of all SOLIVIA inverters will look like new for years to come.

The private homeowner can check his installation on the Internet at any time with the monitoring portal from Delta. All status messages can be directly read on the easy-to-use inverter display.

The installer can also get extensive inverter data on his PC and configure the settings easily with the service software.

The integrated USB interface of the SOLIVIA TR-series inverters is used for updating the firmware, uploading and downloading settings as well as for recording measurement data.

For a residential or small commercial installation, we recommend the following SOLIVIA inverters:

- SOLIVIA 2.0 TR
- SOLIVIA 2.5 TR
- SOLIVIA 3.0 TR
- SOLIVIA 3.3 TR
- SOLIVIA 3.6 TR
- SOLIVIA 5.0 TR
- RPI M6A
- RPI M8A
- RPI M10A
- SOLIVIA 10 TR
- SOLIVIA 11 TR
- SOLIVIA 12 TL

Our Delta Service & Support Team will be happy to advise the installer and the end customer should any questions arise about the use of the SOLIVIA inverter.



(Photo: K-W-H Energy GmbH)

Reference installation in the Netherlands: 5 kW nominal output power - 20 solar modules - 2 Delta string inverters

## SOLIVIA 2.0 TR / 2.5 TR



Product picture can vary depending on the model

## Technical data SOLIVIA 2.0 TR / 2.5 TR

INPUT (DC)	SOLIVIA 2.0 EU G4 TR	SOLIVIA 2.5 EU G4 TR
Max. recommended PV power	2400 W <sub>P</sub>	3030 W <sub>P</sub>
Nominal power	2200 W	2750 W
Voltage range	125 600 V	
Full power MPP range	150 480 V	
Nominal current	6.2 A @ 360 V	7.2 A @ 360 V
Max. current	15 A	18.2 A

#### OUTPUT (AC)

Nominal apparent power	2000 VA 1), 2), 3)	2500 VA 1), 2), 3)
Voltage range	184 264 V <sup>4)</sup>	
Nominal current	8.7 A 10.9 A	
Nominal frequency	50 Hz	
Frequency range	45 65 Hz <sup>4)</sup>	
Power factor adjustable	0.8 cap 0.8 ind	
Total harmonic distortion (THD)	< 3 % @ nominal apparent power	

#### **GENERAL SPECIFICATION**

Model name	SOLIVIA 2.0 EU G4 TR	SOLIVIA 2.5 EU G4 TR
Part number Delta	EOE45010459	EOE45010288
Max. efficiency	95.8 %	96.1 %
Efficiency EU	93.1 %	94.3 %
Operating temperature	-25 +70 °C	
Full power without derating	-25 +55 °C	
Storage temperature	-25 +80 °C	
Humidity	0 95 %	
Max. operating altitude	2000 m (above sea level)	

Size (L x W x D)	418 x 410 x 182 mm	
Weight	21.5 kg	
Cooling	Convection	
AC connector	Wieland RST25i3S	
DC connector	1 pair of Multi-Contact MC4	2 pairs of Multi-Contact MC4
Communication interfaces	2 x RJ45 / RS485 + 1 x USB A	
DC disconnector	Integrated	
Display	3 LEDs, 4-line LCD	

STANDARDS / DIRECTIVES	SOLIVIA 2.0 EU G4 TR	SOLIVIA 2.5 EU G4 TR
Protection degree	IP65	
Safety class		l
Configurable trip parameters	Yes	
Insulation monitoring	Ye	es
Overload behavior	Current limitation; power limitation	
Anti-islanding protection / Grid regulation	DIN VDE 0126-1-1/A1; UTE C15-712-1 VDE 16 1-1 A1 VFR 2013/VFR 2014; Synergid C10/11 (06/ 2012); EN 50438/2007; G83/1-1; G83/2; G59/1-2; VDE-AR-N 4105	DIN VDE 0126-1-1/A1; UTE C15-712-1 VDE 16 1-1 A1 VFR 2013/VFR 2014; French Islands (60 Hz); RD 661/2007; RD 1699/2011; CEI 0-21; Synergrid C10/11 (06/ 2012); EN 50438/2007; G83/1-1; G83/2; G59/1-2; VDE-AR-N 4105
EMC	EN61000-6-2; EN61000-6-3; EN61000-3-2; EN61000-3-3	
Safety	IEC62109-1 / -2	

- Cos Phi = 1 (VA = W)
   Continuous nominal active power in the range of Cos Phi = 0.9 cap ... 0.9 ind
   The AC power can be limited at the inverter during commissioning to meet country-specific regulations regarding the maximum permissible grid load.
   AC voltage and frequency range will be programmed according to the individual country requirements.

## SOLIVIA 3.0 TR / 3.3 TR



Product picture can vary depending on the model

### Technical data SOLIVIA 3.0 TR / 3.3 TR

INPUT (DC)	SOLIVIA 3.0 EU G4 TR	SOLIVIA 3.3 EU G4 TR
Max. recommended PV power	3700 W <sub>P</sub>	4000 W <sub>P</sub>
Nominal power	3300 W	3600 W
Voltage range	125 600 V	
Full power MPP range	150 480 V	
Nominal current	9.2 A @ 360 V	10 A @ 360 V
Max. current	22 A	24 A

#### OUTPUT (AC)

Nominal (apparent) power	3000 VA 1), 2), 3)	3300 VA 1), 2), 3)
Voltage range	184 264 V <sup>4)</sup>	184 264 V
Nominal current	13.1 A	14.4 A
Nominal frequency	50 Hz	
Frequency range	45 65 Hz <sup>4)</sup>	
Power factor adjustable	0.8 cap 0.8 ind	
Total harmonic distortion (THD)	< 3 % @ nominal (apparent) power	

#### **GENERAL SPECIFICATION**

Model name	SOLIVIA 3.0 EU G4 TR	SOLIVIA 3.3 EU G4 TR
Part number Delta	EOE46010287	EOE46010252
Max. efficiency	96.1 %	96 %
Efficiency EU	94.6 %	94.7 %
Operating temperature	-25 +70 °C	
Full power without derating	-25 +55 °C	
Storage temperature	-25 +80 °C	
Humidity	0 95 %	
Max. operating altitude	2000 m (above sea level)	

Size (L x W x D)	418 x 410 x 182 mm	
Weight	21.5 kg	
Cooling	Convection	
AC connector	Wieland RST25i3S	
DC connector	2 pairs of Multi-Contact MC4	
Communication interfaces	2 x RJ45 / RS485 + 1 x USB A	
DC disconnector	Integrated	
Display	3 LEDs, 4-line LCD	

STANDARDS / DIRECTIVES	SOLIVIA 3.0 EU G4 TR	SOLIVIA 3.3 EU G4 TR
Protection degree	IP65	
Safety class		I
Configurable trip parameters	Ye	es
Insulation monitoring	Ye	es
Overload behavior	Current limitation; power limitation	
Anti-islanding protection / Grid regulation	DIN VDE 0126-1-1/A1; UTE C15-712-1 VDE 16 1-1 A1 VFR 2013/VFR 2014 French Islands (60 Hz); RD 661/2007; RD 1699/2011; CEI 0-21; Synergrid C10/11 (06/2012); EN 50438/2007; G83/1-1; G83/2; G59/1-2; VDE-AR-N 4105	
EMC	EN61000-6-2; EN61000-6-3; EN61000-3-2; EN61000-3-3	
Safety	IEC62109-1 / -2	

- Cos Phi = 1 (VA = W)
   Continuous nominal active power in the range of Cos Phi = 0.9 cap ... 0.9 ind
   The AC power can be limited at the inverter during commissioning to meet country-specific regulations regarding the maximum permissible grid load.
   AC voltage and frequency range will be programmed according to the individual country requirements.

## SOLIVIA 3.6 TR



Product picture can vary depending on the model

### Technical data SOLIVIA 3.6 TR

INPUT (DC)	SOLIVIA 3.6 EU G4 TR
Max. recommended PV power	4300 W <sub>P</sub>
Nominal power	3850 W
Voltage range	125 600 V
Full power MPP range	170 480 V
Nominal current	10.7 A @ 360 V
Max. current	24 A

#### OUTPUT (AC)

Nominal apparent power	3600 VA 1), 2), 3)
Voltage range	184 264 V <sup>4)</sup>
Nominal current	15.7 A
Nominal frequency	50 Hz
Frequency range	45 65 Hz <sup>4)</sup>
Power factor adjustable	0.8 cap 0.8 ind
Total harmonic distortion (THD)	< 3 % @ nominal apparent power

#### GENERAL SPECIFICATION

Model name	SOLIVIA 3.6 EU G4 TR
Part number Delta	EOE46010316
Max. efficiency	96 %
Efficiency EU	94.6 %
Operating temperature	-25 +70 °C
Full power without derating	-25 +55 °C
Storage temperature	-25 +80 °C
Humidity	0 95 %
Max. operating altitude	2000 m (above sea level)

Size (L x W x D)	418 x 410 x 182 mm
Weight	21.5 kg
Cooling	Convection
AC connector	Wieland RST25i3S
DC connector	2 pairs of Multi-Contact MC4
Communication interfaces	2 x RJ45 / RS485 + 1 x USB A
DC disconnector	Integrated
Display	3 LEDs, 4-line LCD

STANDARDS / DIRECTIVES SOLIVIA 3.6 EU G4 TR		
Protection degree	IP65	
Safety class	I	
Configurable trip parameters	Yes	
Insulation monitoring	Yes	
Overload behavior	Current limitation; power limitation	
Anti-islanding protection / Grid regulation	DIN VDE 0126-1-1/A1; UTE C15-712-1 VDE 16 1-1 A1 VFR 2013/VFR 2014; French Islands (60 Hz); RD 661/2007; RD 1699/2011; CEI 0-21; Synergrid C10/11 (06/2012); EN 50438/2007; G83/1-1; G83/2; G59/1-2; VDE-AR-N 4105	
EMC	EN61000-6-2; EN61000-6-3; EN61000-3-2; EN61000-3-3	
Safety	IEC62109-1 / -2	

- Cos Phi = 1 (VA = W)
   Continuous nominal active power in the range of Cos Phi = 0.9 cap ... 0.9 ind
   The AC power can be limited at the inverter during commissioning to meet country-specific regulations regarding the maximum permissible grid load.
   AC voltage and frequency range will be programmed according to the individual country requirements.

## SOLIVIA 5.0 TR



Product picture can vary depending on the model

### Technical data SOLIVIA 5.0 TR

INPUT (DC)	SOLIVIA 5.0 EU G4 TR
Max. recommended PV power	6000 W <sub>P</sub> (5320 W <sub>P</sub> DE / 5250 W <sub>P</sub> BE)
Nominal power	5500 W (4850 W DE / BE)
Voltage range	125 600 V
Full power MPP range	150 480 V
Nominal current	15.7 A @ 350 V
Max. current	36.6 A

#### OUTPUT (AC)

Nominal (apparent) power	5000 VA 1), 2), 3)
Voltage range	184 264 V <sup>4)</sup>
Nominal current	22 A
Nominal frequency	50 Hz
Frequency range	45 65 Hz <sup>4)</sup>
Power factor adjustable	0.8 cap 0.8 ind
Total harmonic distortion (THD)	< 5 % @ nominal apparent power

#### GENERAL SPECIFICATION

Model name	SOLIVIA 5.0 EU G4 TR
Part number Delta	EOE46010253
Max. efficiency	96 %
Efficiency EU	94.7 %
Operating temperature	-25 +70 °C
Full power without derating	-25 +55 °C
Storage temperature	-25 +80 °C
Humidity	0 95 %
Max. operating altitude	2000 m (above sea level)

Size (L x W x D)	512 x 410 x 182 mm
Weight	31 kg
Cooling	Convection
AC connector	Wieland RST25i3S
DC connector	2 pairs of Multi-Contact MC4
Communication interfaces	2 x RJ45 / RS485 + 1 x USB A
DC disconnector	Integrated
Display	3 LEDs, 4-line LCD

STANDARDS / DIRECTIVES SOLIVIA 5.0 EU G4 TR		
Protection degree	IP65	
Safety class	1	
Configurable trip parameters	Yes	
Insulation monitoring	Yes	
Overload behavior	Current limitation; power limitation	
Anti-islanding protection / Grid regulation	DIN VDE 0126-1-1/A1; UTE C15-712-1 VDE 16 1-1 A1 VFR 2013/VFR 2014; French Islands (60 Hz); RD 661/2007; RD 1699/2011; CEI 0-21; Synergrid C10/11 (06/2012); EN 50438/2007; G59/1-2; VDE-AR-N 4105	
EMC	EN61000-6-2; EN61000-6-3; EN61000-3-11; EN61000-3-12	
Safety	IEC62109-1 / -2	

- 1) Cos Phi = 1 (VA = W)
  2) Continuous nominal active power in the range of Cos Phi = 0.95 cap ... 0.95 ind
  3) The AC power can be limited at the inverter during commissioning to meet country-specific regulations regarding the maximum permissible grid load.
  4) AC voltage and frequency range will be programmed according to the individual country requirements.

## RPI M6A / M8A



Product picture can vary depending on the model

## Technical data RPI M6A / M8A

INPUT (DC)	RPI M6A	RPI M8A
Max. recommended PV power	7.5 kW <sub>P</sub> 1)	10 kW <sub>P</sub> 1)
Nominal power	6.6 kW	8.8 kW
Voltage range	200 1000 V	
Startup voltage	250 V	
Full power MPP range	315 800 V <sup>1)</sup>	415 800 V 1)
Max. current	20 A (10 A x 2 MPPT)	
Max. number of MPP trackers	Parallel inputs: 1 MPP tracker Separate inputs: 2 MPP trackers	
Input load	Symmetrical and asymmetrical (40/60 %)	

#### OUTPUT (AC)

Nominal apparent power	6.0 kVA <sup>2)</sup>	8.0 kVA <sup>2)</sup>
Voltage range	230 ± 20 % / 400 V ± 20 % <sup>3)</sup> 3 phase + PE or 3 phase + N + PE	
Nominal current	8.7 A	11.6 A
Nominal frequency	50 / 60 Hz	
Frequency range	50 / 60 Hz ± 5 Hz <sup>3)</sup>	
Power factor adjustable	0.8 cap 0.8 ind	
Total harmonic distortion (THD)	< 3 % @ nominal apparent power	

#### **GENERAL SPECIFICATION**

Model name	RPI M6A	RPI M8A
Part number Delta	RPI602FA0E1000	RPI802FA0E1000
Max. efficiency	98.3 %	98.3 %
Efficiency EU	97.6 %	97.9 %
Operating temperature	-25 +60 °C	
Full power without derating	-25 +40 °C	
Storage temperature	-25 +60 °C	
Humidity	0 100 % non-condensing	
Max. operating altitude	2000 m (above sea level)	
Standard guarantee	5 years (guarantee extension available upon request)	

Size (W x H x D)	510 x 445 x 117 mm
Weight	24.5 kg
Cooling	Convection cooling
AC connector	Amphenol C16/3
DC connector	2 pairs of Multi-Contact MC4
Communication interfaces	2 x RS485, 1 x dry contact, 1 x emergency power-off (EPO), 6 x digital inputs
AC / DC disconnector	Integrated
Display	2 LEDs, 4-line LCD

SAFETY / STANDARDS	RPI M6A	RPI M8A
Protection degree	IP65	
Safety class	1	
Configurable trip parameters	Yes	
Insulation monitoring	Yes	
Overload behavior	Current limitation; power limitation	
Anti-islanding protection / Grid regulation	VDE 0126-1-1; VDE-AR-N 4105; EN 50438/2007; Synergrid C10/C11 06/2012; ÖNORM E8001-4-712 + A1: 04/2014	
EMC	EN61000-6-2; EN61000-6-3; EN61000-3-2; EN61000-3-3	
Safety	IEC62109-1 / -2; CE compliance	

- When operated with symmetrical input load (50/50 %)
   Cos Phi = 1 (VA = W)
   AC voltage and frequency range will be programmed according to the individual country requirements.

## RPI M10A



Product picture can vary depending on the model

## Technical data RPI M10A

INPUT (DC)	RPI M10A
Max. recommended PV power	12.5 kW <sub>P</sub> <sup>1)</sup>
Nominal power	10.8 kW
Voltage range	200 1000 V
Startup voltage	250 V
Full power MPP range	415 800 V <sup>1)</sup>
Max. current	25 A (15A / 10 A per MPP tracker)
Max. number of MPP trackers	Parallel inputs: 1 MPP tracker Separate inputs: 2 MPP trackers
Input load	Symmetrical and asymmetrical 2)

#### OUTPUT (AC)

Nominal apparent power	10 kVA <sup>3)</sup>
Voltage range	230 ± 20% / 400 V ± 20% <sup>4)</sup> 3 phase + PE or 3 phase + N + PE
Nominal current	14.5 A
Nominal frequency	50 / 60 Hz
Frequency range	50 / 60 Hz ± 5 Hz <sup>4)</sup>
Power factor adjustable	0.8 cap 0.8 ind
Total harmonic distortion (THD)	< 3 % @ nominal apparent power

#### **GENERAL SPECIFICATION**

Model name	RPI M10A
Part number Delta	RPI103FA0E1000
Max. efficiency	98.3 %
Efficiency EU	98.0 %
Operating temperature	-25 +60 °C
Full power without derating	-25 +40 °C
Storage temperature	-25 +60 °C
Humidity	0 95 %
Max. operating altitude	2000 m (above sea level)
Standard guarantee	5 years (guarantee extension available upon request)

Size (W x H x D)	510 × 445 × 117 mm
Weight	26 kg
Cooling	Convection cooling
AC connector	Amphenol C16-3
DC connector	3 pairs of Multi-Contact MC4
Communication interfaces	2 x RS485, 1 x dry contact, 1 x emergency power-off (EPO), 6 x digital inputs
AC / DC disconnector	Integrated
Display	2 LEDs, 4-line LCD

SAFETY / STANDARDS	RPI M10A
Protection degree	IP65
Safety class	L
Configurable trip parameters	Yes
Insulation monitoring	Yes
Overload behavior	Current limitation; power limitation
Anti-islanding protection / Grid regulation	VDE 0126-1-1; VDE-AR-N 4105; EN 50438/2007; Synergrid C10/C11 06/2012; ÖNORM E8001-4-712 + A1: 04/2014
EMC	EN61000-6-2; EN61000-6-3; EN61000-3-11; EN61000-3-12
Safety	IEC62109-1 / -2; CE compliance

- When operated with symmetrical input load (50/50 %)
   asymmetrical: fixed 60/40 %
   Cos Phi = 1 (VA = W)
   AC voltage and frequency range will be programmed according to the individual country requirements.

## SOLIVIA 10 TR / 11 TR



Product picture can vary depending on the model

### Technical data SOLIVIA 10 TR / 11 TR

INPUT (DC)	SOL10.0-1TR3-E4	SOL11.0-1TR3-E4
Max. recommended PV power	12.1 kW <sub>P</sub>	13.3 kW <sub>P</sub>
Nominal power	10.6 kW	11.6 kW
Voltage range	375 1	1000 V 1)
Full power MPP range	375	. 850 V
Nominal current	17.7 A @ 600 V	19.5 A @ 600 V
Max. current	26.4 A	29 A

#### OUTPUT (AC)

Nominal apparent power	10 kVA <sup>2), 3), 4)</sup>	11 kVA <sup>2), 3), 4)</sup>
Voltage range	3 x 400 V + N + PE (+18 / -20 %) 5)	
Nominal current	14.5 A	16 A
Nominal frequency	50 Hz	
Frequency range	50 Hz ± 5 Hz <sup>5)</sup>	
Power factor adjustable	0.8 cap 0.8 ind	
Total harmonic distortion (THD)	< 5 % @ nominal apparent power	

#### GENERAL SPECIFICATION

Model name	SOL10.0-1TR3-E4	SOL11.0-1TR3-E4
Part number Delta	EOE47030453	EOE48030469
Max. efficiency	96.8 %	96.8 %
Efficiency EU	95.6 %	95.6 %
Operating temperature	-25 +70 °C	
Full power without derating	-25 +58 °C	-25 +55 °C
Storage temperature	-25 +80 °C	
Humidity	0 95 %	
Max. operating altitude	2000 m (above sea level)	

Size (L x W x D)	685 x 410 x 185 mm	
Weight	39 kg	
Cooling	Fan (plug & play)	
AC connector	Amphenol C16/3	
DC connector	3 pairs of Multi-Contact MC4	
Communication interfaces	2 x RJ45 / RS485 + 1 x USB A	
DC disconnector	Integrated	
Display	3 LEDs, 4-line LCD	

STANDARDS / DIRECTIVES	SOL10.0-1TR3-E4	SOL11.0-1TR3-E4	
Protection degree	IP65 / IP54 <sup>6)</sup>		
Safety class		I	
Configurable trip parameters	Y	es	
Insulation monitoring	Y	Yes	
Overload behavior	Current limitatio	n; power limitation	
Anti-islanding protection / Grid regulation	DIN VDE 0126-1-1/A1; UTE C15-712-1 VDE 16 1-1 A1 VFR 2013/VFR 2014; French Islands (60 Hz); RD 661/2007; RD 1699/2011; RD 1663/2000; Synergrid C10/11 (06/2012); EN 50438/2007; G59/1-2; VDE-AR-N 4105	DIN VDE 0126-1-1/A1; UTE C15-712-1 VDE 16 1-1 A1 VFR 2013/VFR 2014; French Islands (60 Hz); RD 661/2007; RD 1669/2011; RD 1663/2000; Synergrid C10/11 (06/ 2012); EN 50438/2007; G59/1-2; VDE-AR-N 4105; BDEW	
EMC	EN61000-6-2; EN61000-6-3; EN61000-3-11; EN61000-3-12		
Safety	IEC62103; IEC62109	9-1 / -2; CE Compliance	

- Maximum input voltage without damage: 1000 V
   Cos Phi = 1 (VA = W)
   Continuous nominal active power in the range of Cos Phi = 0.9 cap ... 0.9 ind
   The AC power can be limited at the inverter during commissioning to meet country-specific regulations regarding the maximum permissible grid load.
   AC voltage and frequency range will be programmed according to the individual country requirements.
- requirements.
  6) IP65 for electronics / IP54 for cooling area

## SOLIVIA 12 TL



Product picture can vary depending on the model

### Technical data SOLIVIA 12 TL

INPUT (DC)	SOLIVIA 12 EU T4 TL
Max. recommended PV power	15.6 kW <sub>P</sub> <sup>1)</sup>
Nominal power	12.6 kW
Voltage range	250 1000 V
Full power MPP range	420 850 V <sup>1)</sup>
Max. current	30 A (20 A per MPP tracker)
Max. number of MPP trackers	Parallel inputs: 1 MPP tracker Separate inputs: 2 MPP trackers
Input load	Symmetrical and asymmetrical (33/67 %)

#### OUTPUT (AC)

Nominal apparent power	12.0 kVA <sup>2)</sup>
Voltage range	$3 \times 230 / 400 \text{ V ($\pm$ 20 \%)} + \text{N} + \text{PE}^{-3)}$
Nominal current (per phase)	17.4 A
Nominal frequency	50 / 60 Hz
Frequency range	50 / 60 Hz ± 5 Hz <sup>3)</sup>
Power factor adjustable	0.8 cap 0.8 ind
Total harmonic distortion (THD)	< 3 % @ nominal apparent power

#### **GENERAL SPECIFICATION**

Model name	SOLIVIA 12 EU T4 TL
Part number Delta	EOE48030542
Max. efficiency	98.3 %
Efficiency EU	97.7 %
Operating temperature	-20 +60 °C
Full power without derating	-20 +40 °C
Storage temperature	-25 +70 °C
Humidity	5 95 %
Max. operating altitude	2000 m (above sea level)

Size (L x W x D)	620 x 625 x 275 mm
Weight	40 kg
Cooling	Convection with fans
AC connector	Amphenol C16/3
DC connector	4 pairs of Multi-Contact MC4
Communication interfaces	RS485
DC disconnector	Integrated
Display	5" monochrome graphical LCD

SAFETY / STANDARDS	SOLIVIA 12 EU T4 TL
Protection degree	IP65 / IP55 <sup>4)</sup>
Safety class	I
Configurable trip parameters	Yes
Insulation monitoring	Yes
Overload behavior	Current limitation; power limitation
Anti-islanding protection / Grid regulation	DIN VDE 0126-1-1/A1; UTE C15-712-1 VDE 16 1-1 A1 VFR 2013/VFR 2014; French Islands (60 Hz); VDE-AR-N 4105; Synergrid C10/C11 (06/2012), EN 50438/2007, CEI 0-21; ÖNORM E8001-4-712 + A1: 04/2014; TOR D4
EMC	EN61000-6-2; EN61000-6-3
Safety	IEC62109-1 / -2; CE compliance

- When operated with symmetrical input load (50/50 %)
   Cos Phi = 1 (VA = W)
   AC voltage and frequency range will be programmed according to the individual country requirements.
   IP65 for electronics / IP55 for cooling area

## Solar inverters for large commercial / ground mounted arrays



For larger PV systems, such as those frequently used in the commercial or agricultural sectors, our three-phase Delta solar inverters are ideal:

- SOLIVIA 15 TL
- SOLIVIA 20 TL
- SOLIVIA 30 TL
- RPI M50A

The three-phase Delta solar inverters have maximum efficiency of up to 98.6 %. In comparison with other commercially available devices, the Delta inverters offer the highest efficiency with a much wider power range. Combined with very good temperature performance they ensure maximum yield and profits, even with outdoor installations.

#### RPI M50A

The RPI M50A is the flagship of the Delta inverter line and has an exceptional power density-to-size ratio. It offers two MPP Trackers that support symmetrical and asymmetrical loading (40/60 %), a wide input voltage range and extensive adjustment functions for active and reactive power.

RPI M50A inverters ship standard with a mounting plate, the AC connector and DC connectors for all DC inputs to allow quick installation right out of the box. Built-in and replaceable AC and DC-side Type 2 SPDs (surge protection devices) and string fuses are also featured.

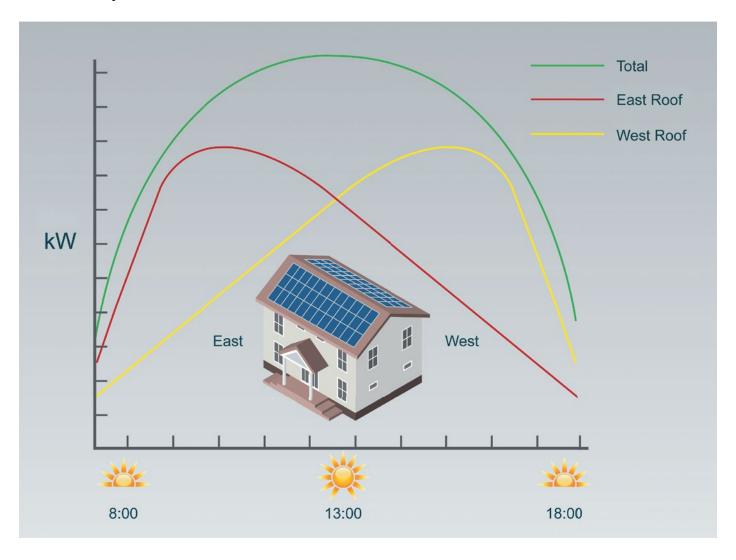
#### **SOLIVIA TL**

The TL (transformerless) series offer advanced versatility in system design and maximum yield due to a wide input voltage range of (250 – 1000 V), coupled with 2 MPP trackers that support asymmetrical loading (33/67 %).

The comparatively low weight and compact design facilitates handling significantly. The supplied mounting plate simplifies the installation of Delta solar inverters. After mounting the plate to the desired location, the inverter is simply pushed onto the wall mount on the rails – no further drilling is required.

The environmental conditions in agriculture and industry place high demands on an inverter. The completely sealed and shockproof housing protects the solar inverter from dust and water spray from all directions, so that Delta inverters can be installed in these areas and in protected outdoor areas.

### Maximum yield for East / West Roof Installations



SOLIVIA TL solar inverters from 6 kVA to 50 kVA output power feature two Maximum Power Point (MPP) trackers that support symmetrical and asymmetrical DC loading (SOLIVIA TL: 33/67 %; RPI M6A / M8A / M50A: 40/60 %). Each tracker will optimize the yield for two different DC inputs automatically. This is very useful in such scenarios as East / West roof installations. When one input is fed from panels on an east facing roof and one input fed from panels on a west facing roof, the dual MPP trackers will automatically sense the asymmetrical DC loading when

solar radiation is uneven on both roofs and provide optimum adjustment. The final result: maximum yield from your PV system.

The dual MPP trackers can also help compensate in situations where solar modules have partial shading during the day.

## SOLIVIA 15 TL / 20 TL



Product picture can vary depending on the model

## Technical data SOLIVIA 15 TL / 20 TL

INPUT (DC)	SOLIVIA 15 EU G4 TL	SOLIVIA 20 EU G4 TL
Max. recommended PV power	19 kW <sub>P</sub> 1)	25 kW <sub>P</sub> 1)
Nominal power	15.3 kW	20.4 kW
Voltage range	250 1000 V	
Full power MPP range	350 800 V ¹)	
Max. current	48 A (24 A per MPP)	60 A (30 A per MPP)
Max. number of MPP trackers	Parallel inputs: 1 MPP tracker Separate inputs: 2 MPP trackers	
Input load	Symmetrical and asymmetrical (33/67 %)	

#### OUTPUT (AC)

Nominal (apparent) power	15 kVA <sup>2)</sup>	20 kVA <sup>2)</sup>
Voltage range	$3 \times 230 / 400 \text{ V } (\pm 20 \text{ \%}) + \text{N} + \text{PE}^{3)}$	
Nominal current (per phase)	22 A	29 A
Nominal frequency	50 / 60 Hz	
Frequency range	50 / 60 Hz ± 5 Hz <sup>3)</sup>	
Power factor adjustable	0.8 cap 0.8 ind	
Total harmonic distortion (THD)	< 3 % @ nominal (apparent) power	

#### GENERAL SPECIFICATION

Model name	SOLIVIA 15 EU G4 TL	SOLIVIA 20 EU G4 TL
Part number Delta	EOE48010362	EOE48010364
Max. efficiency	98 %	
Efficiency EU	97.8 %	
Operating temperature	-20 +60 °C	
Full power without derating	-20 +40 °C	
Storage temperature	-20 +70 °C	
Humidity	5 95 %	
Max. operating altitude	2000 m (above sea level)	

Size (L x W x D)	952 x 625 x 275 mm
Weight	67.2 kg
Cooling	Convection with fans
AC connector	Amphenol C16/3
DC connector	4 pairs of Multi-Contact MC4
Communication interfaces	2 x RJ45 / RS485
DC disconnector	Integrated
Display	5" monochrome graphical LCD

STANDARDS / DIRECTIVES	SOLIVIA 15 EU G4 TL	SOLIVIA 20 EU G4 TL
Protection degree	IP65 / IP55 <sup>4)</sup>	
Safety class	I .	
Configurable trip parameters	Yo	es
Insulation monitoring	Ye	es
Overload behavior	Current limitation	n; power limitation
Anti-islanding protection / Grid regulation	VDE 0126-1-1/A1; UTE C15-712-1 VDE 16 1-1 A1 VFR 2013/VFR 2014; UTE C15-712 MV; French Islands (60 Hz); RD 661/2007; RD 1699/2011; CEI 0-21; Synergrid C10/11 (06/2012); EN 50438/2007; G59/1-2; G59/3 LV; VDE-ARN 4105; BDEW; SONDO Klasse B & C; ÖNORM E8001-4-712 + A1: 04/2014; TOR D4	
EMC		00-6-3; EN61000-3-11; 000-3-12
Safety	IEC62109-1 / -2	e; CE Compliance

- When operated with balanced DC inputs (50/50 %)
   Cos Phi = 1 (VA = W)
   AC voltage and frequency range will be programmed according to the individual country requirements.
   IP65 for electronics / IP55 for cooling area

## SOLIVIA 30 TL



Product picture can vary depending on the model

### Technical data SOLIVIA 30 TL

INPUT (DC)	SOLIVIA 30 EU T4 TL
Max. recommended PV power	38 kW <sub>P</sub> <sup>1)</sup>
Nominal power	31 kW <sup>2)</sup>
Voltage range	250 1000 V
Full power MPP range	480 800 V <sup>1)</sup>
Max. current	68 A (34 A per MPP)
Max. number of MPP trackers	Parallel inputs: 1 MPP tracker Separate inputs: 2 MPP trackers
Input load	Symmetrical and asymmetrical (33/67 %)

#### OUTPUT (AC)

Nominal apparent power	30 kVA <sup>3)</sup>
Voltage range	3 x 230 / 400 V (± 20 %) + N + PE 4)
Nominal current	43 A
Nominal frequency	50 Hz
Frequency range	50 Hz ± 5 Hz <sup>4)</sup>
Power factor adjustable	0.8 cap 0.8 ind
Total harmonic distortion (THD)	< 3 % @ nominal apparent power

#### **GENERAL SPECIFICATION**

Model name	SOLIVIA 30 EU T4 TL
Part number Delta	EOE48030458
Max. efficiency	98.2 %
Efficiency EU	97.9 %
Operating temperature	-20 +60 °C
Full power without derating	-20 +40 °C
Storage temperature	-25 +70 °C
Humidity	5 95 %
Max. operating altitude	2000 m (above sea level)

Size (L x W x D)	952 x 625 x 275 mm
Weight	72.2 kg
Cooling	Convection with fans
AC connector	Amphenol PPC Series
DC connector	6 pairs of Multi-Contact MC4
Communication interfaces	2 x RJ45 / RS485
DC disconnector	Integrated
Display	5" monochrome graphical LCD

STANDARDS / DIRECTIVES SOLIVIA 30 EU T4 TL		
Protection degree	IP65 / IP55 <sup>5)</sup>	
Safety class	1	
Configurable trip parameters	Yes	
Insulation monitoring	Yes	
Overload behavior	Current limitation; power limitation	
Anti-islanding protection / Grid regulation	VDE 0126-1-1/A1; UTE C15-712-1 VDE 16 1-1 A1 VFR 2013/VFR 2014; UTE C15-712 MV; French Islands (60 Hz); CEI 0-21; Synergrid C10/11 (06/2012); EN 50438/2007; G59/1-2; G59/3 LV; VDE-AR-N 4105; BDEW; SONDO Klasse B & C; ÖNORM E8001-4-712 + A1: 04/2014; TOR D4	
EMC	EN61000-6-2; EN61000-6-3; EN61000-3-11; EN61000-3-12	
Safety	IEC62109-1 / -2; CE Compliance	

- When operated with balanced DC inputs (50/50 %)
   Max. 20 kW per DC input with asymmetrical load
   Cos Phi = 1 (VA = W)
   AC voltage and frequency range will be programmed according to the individual country requirements.
   IP65 for electronics / IP55 for cooling area

## RPI M50A



Product picture can vary depending on the model

### Technical data RPI M50A

INPUT (DC)	RPI M50A
Max. recommended PV power	63 kW <sub>P</sub> <sup>1)</sup>
Nominal power	54 kW <sup>2)</sup>
Voltage range	200 1000 V
Startup voltage	250 V
Full power MPP range	520 800 V <sup>1)</sup>
Max. current	100 A (50 A per MPP tracker)
Max. number of MPP trackers	Parallel inputs: 1 MPP tracker Separate inputs: 2 MPP trackers
Input load	Symmetrical and asymmetrical (40/60 %)
String Fuse Protection	15 A <sup>3)</sup>
Surge Protection Devices	Type 2

	PUT	

Nominal apparent power	50 kVA <sup>4)</sup>
Voltage range	$230 \pm 20\%$ / $400 \text{ V} \pm 20\%$ <sup>5)</sup> 3 phase + PE or 3 phase + N + PE
Nominal current	72.5 A
Nominal frequency	50 / 60 Hz
Frequency range	50 / 60 Hz ± 5 Hz <sup>5)</sup>
Power factor adjustable	0.8 cap 0.8 ind
Total harmonic distortion (THD)	< 3 % @ nominal apparent power
Surge Protection Devices	Type 2

#### GENERAL SPECIFICATION

Model name	RPI M50A
Part number Delta	RPI503FA0E0000
Max. efficiency	98.6 %
Efficiency EU	98.4 %
Operating temperature	-25 +60 °C
Full power without derating	-25 +40 °C
Storage temperature	-30 +60 °C
Humidity	0 100 % non-condensing
Max. operating altitude	2000 m (above sea level)
Standard guarantee	5 years (guarantee extension is possible)

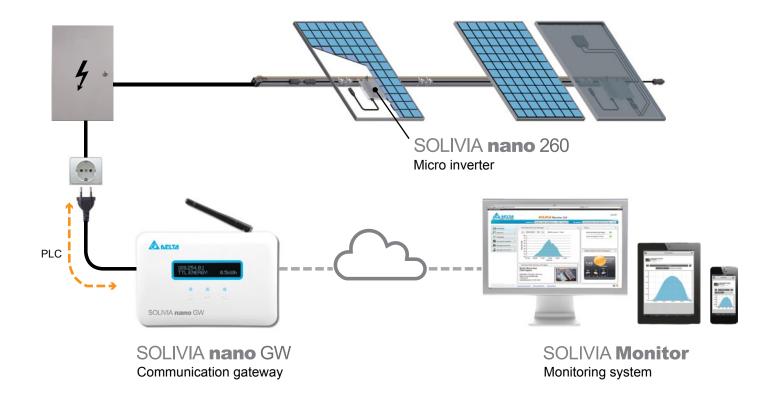
Size (L x W x D)	740 × 612 × 278 mm
Weight	74 kg
Cooling	Fans
AC connector	China Aviation Optical-Electrical Technology Co. PVE5T125KE36
DC connector	10 pairs of Multi-Contact MC4
Communication interfaces	2 x RJ45 / RS485, 6 digital inputs
AC / DC disconnector	Integrated
Display	2 LEDs, 4-line LCD

SAFETY / STANDARDS	RPI M50A
Protection degree	IP65
Safety class	I
Configurable trip parameters	Yes
Insulation monitoring	Yes
Overload behavior	Current limitation; power limitation
Anti-islanding protection / Grid regulation	VDE 0126-1-1/A1; UTE C15-712-1 VDE 16 1-1 A1 VFR 2013/VFR 2014; UTE C15-712 MV; French Islands (50 Hz/60 Hz); G59/3 LV; VDE-AR-N 4105; BDEW; ÖNORM E8001-4-712 + A1: 04/2014; TOR D4
EMC	EN61000-6-2; EN61000-6-3; EN61000-3-11; EN61000-3-12
Safety	IEC62109-1 / -2; CE compliance

- 1) When operated with balanced DC inputs (50/50 %)
  2) Max. 32.4 kW per DC input with asymmetrical load
  3) The value when internal temperature of the inverter is 25 °C. At higher internal temperatures, the value may drop to 10 A.
  4) Cos Phi = 1 (VA = W)
  5) AC voltage and frequency range will be programmed according to the individual country requirements.

## SOLIVIA nano Micro Inverter System

### How the system works



## Product advantages

## Why you should use a SOLIVIA nano 260



#### Easy planning

No complicated calculations are necessary when laying out the system.



#### Low initial investment

Start with a PV system that matches your financial resources. You can expand your system later without difficulty.



#### Easy to expand

Install new modules one at a time to expand your PV system.



#### Long lifespan

The sturdy and reliable design allows the nano 260 to run reliably for many years.



#### Optimum use of space

Arrange the solar modules to make the most of the available space.



#### Safe application

Using a low DC voltage makes the system safer to operate.



#### Active grid management

The SOLIVIA GW gateway makes it possible to actively control the quantity of energy fed into the grid.



#### Maximum output

Thanks to its continuous balancing, the nano 260 always operates in the maximum possible output range.



#### **Quick assembly**

The nano 260 is installed and ready for use in just a few, simple steps.



#### Flexible use

SOLIVIA nano 260 makes even the most complicated roof surfaces suitable for PV systems.



#### Optimum protection

The specially sealed housing protects the nano 260 from bad weather conditions.



#### Minimal space requirements

If there is space for one solar module, there's enough space for a complete PV system.

## SOLIVIA nano 260

## Use even the smallest spaces for installing a PV system

The SOLIVIA nano 260 Micro Inverter from Delta gives a solar module its own "personal" inverter. The micro inverter ensures optimum balancing of a solar module's output – independently of other solar modules in a PV plant.

This is a major advantage over larger string inverters that are generally connected to a large number of solar modules. Conventional string inverters are ideal for large, uniform areas.

However, in the case of complicated roof surfaces conventional string inverters reach their limits. In these situations, a PV system only makes sense if micro inverters are used.

Using micro inverters makes it possible to fit solar modules to surfaces that would normally not be suitable. This includes all roof surfaces that are shaded for part of the day, e.g. due to trees, power poles, chimneys, dormers or other structures on the building.



SOLIVIA nano 260 micro inverter

#### **Technical data**

SOLIVIA nano 260		
INPUT (DC)		
Max. recommended PV power	320 W	
Nominal power	280 W	
Voltage range	25 50 Vdc	
Full power MPP range	25 50 Vdc	
Nominal current	9.2 A	
Max. current	10 A	
Max. number of MPP trackers	1	
OUTPUT (AC)		
Nominal power	260 W	
Voltage range	230 V +/-10 % / -20 %	
Nominal current	1.2 A	
Nominal frequency	50 Hz / 60 Hz	
Frequency range	50 Hz	
Power factor	0.9 cap 0.9 ind	
Total harmonic distortion (THD)	< 5 %	
GENERAL SPECIFICATION		
Part number Delta	EOE43010578	
Max. efficiency	96 %	
Efficiency EU	95.3 %	
Operating temperature	-40 +65 °C	
Storage temperature	-40 +85 °C	
DIMENSIONS/CONNECTIONS		
Size (H x W x D)	227.6 x 211 x 33.4 mm	
Weight	1.3 kg	
AC connector	Amphenol	
DC connector	MultiContact MC4	
SAFETY/STANDARDS		
Protection degree	IP66	
Safety	IEC62109-1 / -2; CE Compliance	

## SOLIVIA nano Micro Inverter System

### How it works



- SOLIVIA nano 260 Micro Inverter harvests the maximum available energy from the PV system. Each solar module has its own micro inverter that is working to seek out the optimum working point of its connected module.
- The AC electricity from the micro inverters is routed to the main distribution box.
- The SOLIVIA nano GW gateway is connected to the SOLIVIA nano 260 micro inverters in order to regulate and monitor them. The necessary data is transmitted via PLC (Powerline Communication), i.e. through the existing AC wiring in the home. All you need to do is connect the gateway to a power outlet somewhere in your residence.
- The SOLIVIA nano GW gateway sends data over the Internet to the SOLIVIA Monitor system via a standard broadband router. The gateway can be connected to the router wirelessly or using a wired network connection.
- SOLIVIA Monitor, Delta's online monitoring portal, provides all the relevant information about yield and operating status in a clear, graphic form in real time. SOLIVIA Monitor works on either a PC or MAC. In addition, there are free smartphone apps for Android, iOS and Windows Phone.

## SOLIVIA nano GW

### Connect your SOLIVIA nano 260 to the Internet



The SOLIVIA nano GW gateway is the communication interface for your micro inverters. It connects the nano 260 Micro Inverters in your PV system over the Internet to the SOLIVIA Monitor, Delta's monitoring system. You can then access important data for your solar system online.

You can also use the SOLIVIA gateway to adjust various parameters, such as the output of individual micro inverters in order to comply with Germany's 70% regulation.

SOLIVIA nano GW Gateway

#### **Technical data**

SOLIVIA nano GW		
Voltage range	90 264 V	
Nominal input voltage	100 / 240 V	
Frequency range	47 63 Hz	
Nominal frequency	50 / 60 Hz	
Max. input power	3 W	
Nominal input power	1,5 W	
Operating temperature	-10 +40 °C	
Storage temperature	-20 +60 °C	
Humidity	5 95 %	
Part number Delta	EOE90010579	
Size (H x W x D)	126.0 x 172.4 x 32.8 mm	
Internet connection	WiFi, Ethernet	
Protection degree	IP20	

## More possibilities

## Find the perfect place for your solar module



If there are different roof orientations, solar modules can be installed on both sides of the roof.



There is even space on small sheds as long as one solar module fits. Perfect for supplying a gazebo with power.



There is no longer anything to stop you from fitting a solar module right next to a dormer or a chimney.



Moving shadows from trees no longer affect all the solar modules in the solar PV system.

## **SOLIVIA Monitor**

SOLIVIA Monitor is a turn-key monitoring system suitable for monitoring several PV systems, which ensures reliable operation and a maximum return on your investment in your solar system.

With its user-friendly Internet application, which provides a quick overview of the most important values, the yield and the system status, the SOLIVIA Monitor is ideal for monitoring PV systems of up to 100 kW.

Easy to understand charts and reports can be displayed at the press of a button. In addition, the system can also show photos of the customer's system, local weather information and environmental savings. SOLIVIA Monitor enables installers to monitor their customers' installations.

PV systems are easy to configure - inverters installed in the PV system are recognized automatically by the monitoring software via the gateway.

SOLIVIA Live is the smartphone and tablet PV system monitoring solution from Delta. The application allows monitoring of your PV installation anytime and anywhere. The application is available for Apple iOS, Android, and Windows Phone 8 operating systems.



### Simple and secure data reporting



Real-time performance data is gathered from the inverters, sent over the internet, and presented on your computer or web-enabled device with easy to read graphs and reports.

### Turn-key monitoring system



The SOLIVIA Monitor system includes the gateway, database, and web application to allow a complete monitoring solution of one or many solar PV systems.

## System alerts



Downtime is minimized with automated alerts providing immediate notification of current or potential problems, which increases the return from your solar investment.

#### Unlimited PV Plants



After registering online, all users can set up an unlimited number of PV plants. This is handy for installers that want to administer or check operation status of their customers' PV plants.

### Technical data SOLIVIA Monitor

LANGUAGES	SOLIVIA MONITOR	
Available languages	Danish, Dutch, English, French, German, Italian	

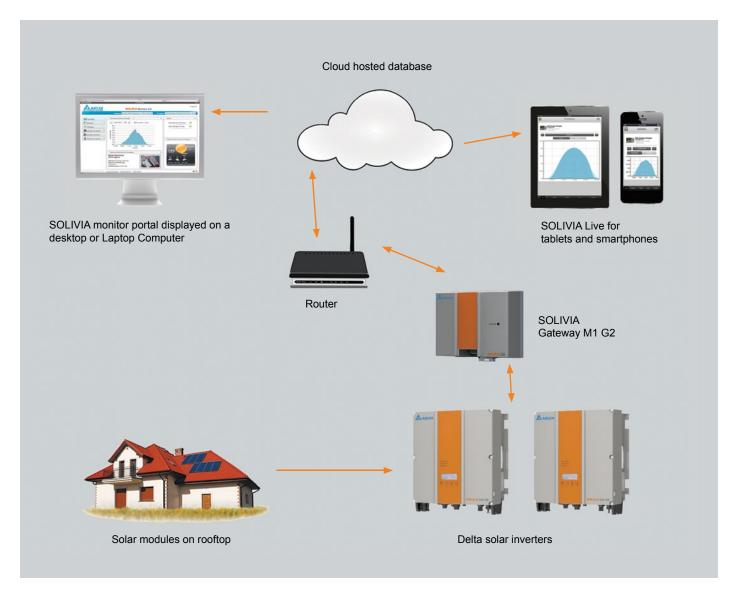
MONITORING	SOLIVIA MONITOR
Inverter monitoring and communication monitoring	Continuous monitoring between the Delta inverter and SOLIVIA Gateway M1 G2, alert email when connection is disrupted

#### PV SYSTEM INFORMATION

	PV system status	Properties and parameters of your PV system are shown	
	Year-by-year comparison	Quick yield overview for the lifetime of the PV system	
Event summary		View event messages in chronological order	

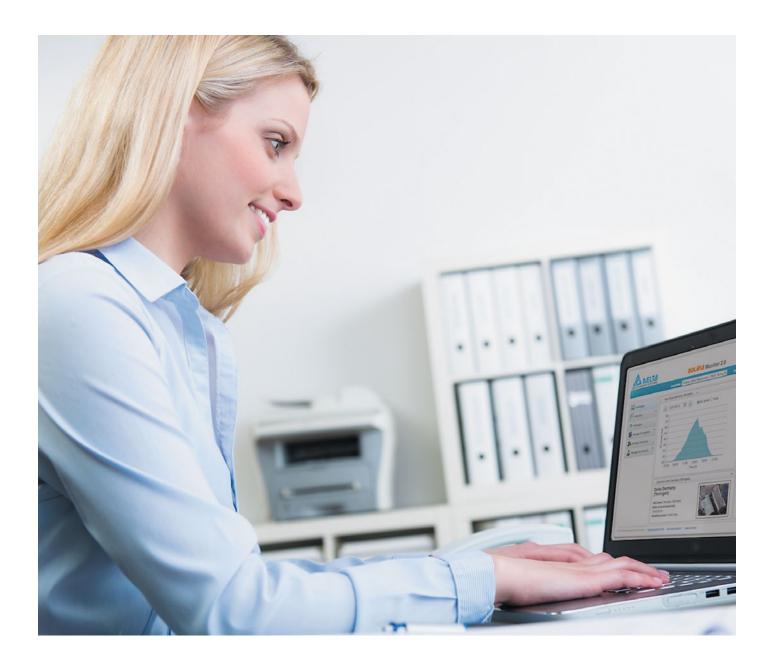
# GRAPHS Standard reports for performance, yield, and DC V- DC A for each inverter or multiple inverters in the PV system

Download to a CSV file or copy to the clipboard



Data download

## Delta Service & Support



Good service is very important. Therefore Delta provides reliable, flexible and competent support.

Customer satisfaction and fast response times are for Delta not just words. Delta cares for partners and customers during the complete lifetime of the product.

Our highly motivated Solar Team supports Delta's customers due to an especially installed Solar Support Hotline which is there when you need help.

If necessary, you can receive local support from our service teams. Exchange units and components are available within two working days.

Do you need to improve your knowledge of PV system and inverter installation? Our Delta Solar Team offers inverter training courses which can be run either on our premises or on your premises on request.

## **SOLIVIA Solar Seminars**

In accordance with our company motto **Smarter. Greener. Together.** we would like to share our knowledge with you and help to prepare you for the future. We offer in-depth specialist and product information about photovoltaics. We provide technical expertise and information about new trends, developments, current topics in the solar industry and support you in your daily work.

Visit our interesting and versatile PV seminars and lay the cornerstone for your long-term success.

We offer different types of seminars, like for example:

- PV Seminars Modular Training Concept
- System Monitoring & Analysis
- Set up, Commissioning and System Maintenance

All our seminars are based on a modular training concept which is adapted especially to your needs and requirements. You determine as well the location of your seminar - our seminars can be held at the location of your choice, e.g. on your premises or at our company locations in Teningen and Soest (Germany).

Detailed information about our PV seminar program is available on our webpage at: www.training.solar-inverter.com

Our competent seminar team is available for all your questions:

Email: training.germany@delta-es.com

Phone: +49 (0)7641 - 455-571



## **Delta Inverter Accessories**

#### SOLIVIA PV Planner - Delta

The SOLIVIA PV Planner is a free application used by the installer to configure a PV system in just a few steps. The PV Planner determines the appropriate SOLIVIA system suggestion following the definition of the installation environment and the PV generator. In addition to the proposed system configuration the PV Planner can also calculate cable losses.

PART NUMBER DELTA	SOLIVIA PV PLANNER	
	Tool for planning PV systems	
	Link: https://pvplanner.solar-inverter.com/	



#### Service Software - Delta

The Delta Service Software can be downloaded from our website free of charge. The software enables the installer e.g. to adapt settings, realize firmware upgrades and other updates without any need to open the inverter. The memory from every inverter can be stored and read out with the software in order to facilitate maintenance and on-site service. The software is used in conjunction with the RS485 to USB adapter kit.

PART NUMBER DELTA	SERVICE SOFTWARE KIT	
	Kit for all SOLIVIA string inverters	
	Download: download.solar-inverter.com	



#### **AC Connectors**

PART NUMBER DELTA	AC CONNECTORS
307253302W	- AC Connector China Aviation Optical-Electrical Technology Co. PVE5T125KE36 - Suitable for RPI M50A
3072477020	- AC Connector Amphenol PPC AC 24 - Suitable for SOLIVIA 30 EU T4 TL
3072390220	- AC Connector Amphenol C16/3 - Suitable for RPI M6A / M8A / M10A, SOLIVIA 6 TL / 8TL / 10 TL / 12 TL / 15 TL / 20TL, SOL10.0-1TR3-E4 and SOL11.0-1TR3-E4 Solar Inverters
307229555N	- AC Connector Wieland RST25i3S - Suitable for SOLIVIA EU G3 TR and SOLIVIA EU G4 TR Solar Inverters with a nominal output power of 2.0 kW up to 5.0 kW



On our website www.solar-inverter.com you can find a complete overview of all Delta inverter accessories.

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