



## Solar inverters M15A / M20A / M30A Flex

Quiet and compact inverters with Wi-Fi for easy integration into a WLAN network. The first choice for larger solar systems on residential and commercial buildings.

# Highlights



Easy commissioning and integration into the Wi-Fi network using a smartphone. System monitoring using a smartphone app or MyDeltaSolar Cloud.



M20A



- 2 MPP trackers (M30A: 3) for more flexibility in PV system design
- Lightweight with IP66 housing for harsh environmental conditions
- Natural convection for low-noise operation
- Integrated mechanical DC disconnect
- Type 2 AC and DC surge protection devices
- Large front door for easy and safe access to internal components
- Integrated Wi-Fi for connecting to a smartphone or an Internet router
- Reactive power compensation 24/7
- Data point collection for string monitoring and I-V curve generation
- Arc fault and reverse polarity protection, Anti-PID feature

# Technical Data

Input (DC)	M15A Flex	M20A Flex	M30A Flex
Maximum input voltage <sup>1)</sup>	1100 V <sub>DC</sub>		
Operating voltage range	200 to 1000 V <sub>DC</sub>		
MPP voltage range	200 to 1000 V <sub>DC</sub>		
MPP voltage range with maximum power	380 to 900 V <sub>DC</sub>	480 to 900 V <sub>DC</sub>	
Nominal voltage	600 V <sub>DC</sub>		
Maximum current (per MPP tracker/total)	25 A/45 A	26 A/48 A	30 A/72 A
Maximum short-circuit current I <sub>SC</sub>	50 A per MPP tracker		
Maximum number of MPP trackers	2 x 2 module strings		3 x 2 module strings
DC surge protection devices	Type 2 (EN 50539-11), replaceable		

Output (AC)	M15A Flex	M20A Flex	M30A Flex
Maximum apparent power <sup>2)</sup>	16.5 kVA	22 kVA	33 kVA
Maximum active power <sup>2)</sup>	16.5 kW	22 kW	33 kW
Nominal apparent power <sup>2)</sup>	15 kVA	20 kVA	30 kVA
Voltage range <sup>3)</sup>	230/400 V <sub>AC</sub> -20%/+30%; 3 phases + PE or 3 phases + N + PE		
Maximum output current	25 A	32 A	50 A
Frequency range <sup>3)</sup>	50/60 Hz ± 5 Hz		
Adjustment range of power factor	0.8 cap to 0.8 ind		
Total harmonic distortion (THD)	< 3% at nominal apparent power		
Consumption in night mode <sup>4)</sup>	< 2 W		
AC surge protection devices	Type 2 (EN 61463-11), replaceable		

General specifications	M15A Flex	M20A Flex	M30A Flex
Delta model name	M15A_220	M20A_220	M30A_230
Delta part number	RPI153M220100	RPI203M220100	RPI303M230100
Peak efficiency	98.4%	98.5%	98.6%
Efficiency EU	97.9%	98.1%	98.2%
Operating temperature range	-25 to +60°C		
Temperature range without power derating	-25 to +50 °C		
Storage temperature range	-25 to +60°C		
Relative humidity	0 to 100%, non-condensing		
Maximum operating altitude	4000 m (above sea level)		
Topology	Without transformer		
Standard warranty	5 years (warranty extension available upon request)		

Mechanical design	M15A Flex	M20A Flex	M30A Flex
Dimensions (H x W x D)	651 × 520 × 220 mm		
Weight	40.5 kg		42 kg
Cooling	Natural convection		
Mounting options	Wall mounting 6) (optional ground mounting)		
Disconnectors	1 mechanical DC disconnectors		
Connection type AC side	AC connector (included with delivery)		
Connection type DC side			
Type	Amphenol H4		
Quantity	4 pairs		6 pairs

# Technical Data

Communication	M15A Flex	M20A Flex	M30A Flex
Communication interfaces	2 x RS485, 1 x dry contact, 1 x external power-off, 6 x digital inputs, Wi-Fi		
Data visualization	DeltaSolar app, MyDeltaSolar Cloud		
Display of operating status	3 LEDs		
Safety/ Standards	M15A Flex	M20A Flex	M30A Flex
Protection class	IP66		
Safety class	I		
Configurable trip parameters	Yes		
Insulation monitoring	Yes		
Overload behavior	Current limitation, power limitation		
Anti-islanding protection/grid regulation	VFR 2019 (Enedis-PRO-RES_10E, Enedis-PRO-RES_64E), VDE-AR-N 4105, EN 50549-1		
EMC	EN 61000-6-2, EN 61000-6-3, EN 61000-3-11, EN 61000-3-12		
Safety	IEC 62109-1/-2; CE compliance		

- 1) The maximum voltage withstand is 1100 VDC. The inverter starts working when the input voltage drops below 1000 VDC.
- 2)  $\cos \Phi = 1$  ( $VA = W$ )
- 3) AC voltage and frequency range are programmed based on the respective country regulations.
- 4) Night-time consumption with standby communication

## Contact



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