



Solar inverters M6A / M8A / M10A

Highly efficient three-phase inverters with display and Wi-Fi —
the perfect choice for private and small-scale commercial PV systems

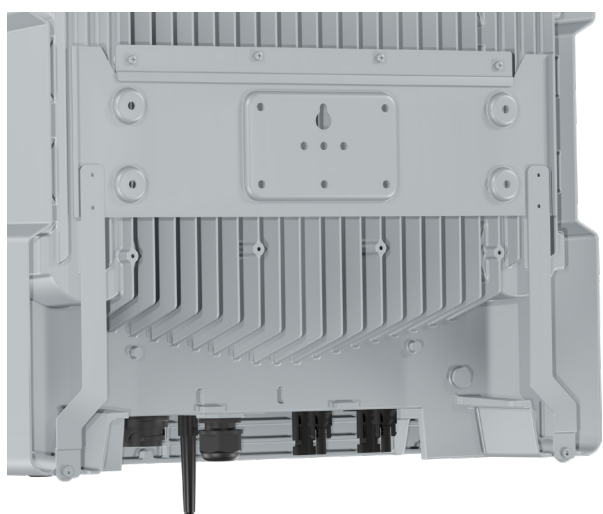
Highlights



Commissioning with smartphone app; system monitoring with smartphone app or MyDeltaSolar Cloud



The inverter can be operated easily using the display. All statistics and information on the current operating status can also be accessed here.



A mounting plate for wall mounting is included in the scope of supply. Due to its low weight, the unit can be lifted and moved by a single person.

- Aluminium housing for long-lasting protection against moisture and corrosion
- Wide input voltage range
- Suitable for indoor and outdoor use (IP65)
- Compact and lightweight for easy installation
- Low noise emission
- All connectors included in the scope of delivery

Technical Data

Input (DC)	M6A	M8A	M10A
Maximum power ¹⁾	6.6 kW ²⁾	8.8 kW ³⁾	11 kW ⁴⁾
Operating voltage range	200 to 1000 V _{DC}		
MPP voltage range	200 to 1000 V _{DC}		
MPP voltage range with max. power at symmetrical load	315 to 800 V _{DC}	415 to 800 V _{DC}	
Switch-on voltage	250 V _{DC}		
Maximum current (per MPP tracker/total)	10 A/20 A		DC1: 15 A, DC2: 10 A/25 A
Maximum number of MPP trackers	Parallel inputs: 1; separate inputs: 2		
Input load	Symmetrical and asymmetrical (60%/40% to 40%/60%)		Symmetrical and asymmetrical (60%/40%)

Output (AC)	M6A	M8A	M10A
Maximum apparent power ⁵⁾	6.3 kVA	8.4 kVA	10.5 kVA
Nominal apparent power ⁵⁾	6.0 kVA	8.0 kVA	10.0 kVA
Voltage range ⁶⁾	230 V _{AC} ± 20% / 400 ± 20%; 3 phases + PE or 3 phases + N + PE		
Nominal current per phase	8.7 A	11.6 A	14.5 A
Frequency range ⁶⁾	50/60 Hz ± 5 Hz		
Adjustment range of power factor	0.8 cap ... 0.8 ind		
Total harmonic distortion (THD)	< 3% at nominal apparent power		

General Specifications	M6A	M8A	M10A
Delta model name	RPI M6A	RPI M8A	RPI M10A
Delta part number	RPI602FA0E1000	RPI802FA0E1000	RPI103FA0E1000
Peak efficiency	98.3%	98.3%	98.3%
Efficiency EU	97.6%	97.6%	98.0%
Operating temperature range	-25 to +60°C		
Temperature range without power derating	-25 to +40°C		
Storage temperature range	-25 to +60°C		
Relative humidity	0 to 100%, non-condensing		
Maximum operating altitude	2000 m (above sea level)		
Standard warranty	5 years (warranty extension available upon request)		

Mechanical design	M6A	M8A	M10A
Dimensions (H x W x D)	445 × 510 × 177 mm		
Weight	25 kg		26 kg
Cooling	Natural convection, without fans		
Disconnectors	1x mechanical AC/DC disconnector		
Connection type AC side	1 AC plug Amphenol C16-3		
Connection type DC side			
Type	Multi-contact MC4		
Q'ty	2 pairs		3 pairs

Communication	M6A	M8A	M10A
Communication interfaces	2 x RS485, 1 x dry contact, 1 x external power-off, 6 x digital inputs, Wi-Fi		
Display	Monochrome 4-line LCD		
Data visualization	DeltaSolar app, MyDeltaSolar Cloud		
Display of operating status	Display, 3 LEDs		

Technical Data

Safety/ Standards	M6A	M8A	M10A
Protection class	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; VDE-AR-N 4105; EN 50438:2007; Synergrid C10/C11 06/2012; UTE C 15-712-1; VDE 0126-1-1/A1; French islands 50 Hz		
EMC	EN 61000-6-2; EN 61000-6-3; EN 61000-3-2; EN 61000-3-3		
Safety	IEC 62109-1/-2; CE compliance		

- 1) When operating with symmetrical DC inputs (50%/50%)
- 2) Maximum 4.25 kW per DC input with asymmetrical load (40%/60%)
- 3) Maximum 5.65 kW per DC input with asymmetrical load (40%/60%)
- 4) Maximum 7.0 kW for input DC1 and 5.4 kW for input DC2
- 5) $\cos \Phi = 1$ ($VA = W$)
- 6) AC voltage and frequency range are programmed based on the respective country regulations.

Contact



Email: solarsales.emea@deltaww.com

Telephone: +49 7641 455 547 (phone number in Germany)