


# M8A

High-efficiency three-phase solar inverters for residential and small commercial PV systems.

200 V↑

Wide input voltage range (200 to 1000 V)

- IP65 aluminium housing for long-lasting protection against moisture and corrosion
- Wide input voltage range
- Integrated display

98.3%

Peak efficiency

- Low noise emission due to fanless design
- Commissioning with smartphone app via Wi-Fi

# 8.4 kVA solar inverter

| Input (DC) | M8A |
|---|---|
| Operating voltage range | 200 to 1000 $V_{DC}$ |
| MPP voltage range | 200 to 1000 $V_{DC}$ |
| MPP voltage range with max. power at sym. load [1] | 415 to 800 $V_{DC}$ |
| Switch-on voltage | 250 $V_{DC}$ |
| Maximum current (per MPP tracker / total) [2] | 10 A/20 A |
| Maximum number of MPP trackers | Parallel inputs: 1; separate inputs: 2 |
| Input load | Symmetrical and asymmetrical (60%/40% to 40%/60%) |

| Output (AC) | M8A |
|---|---|
| Max. Apparent power [3] | 8.4 kVA |
| Nominal apparent power [3] | 8.0 kVA |
| Voltage range [4] | 230 $V_{AC}$ ± 20% / 400 ± 20%; 3 phases + PE or 3 phases + N + PE |
| Nominal current per phase | 11.6 A |
| Frequency range [4] | 50 / 60 Hz ± 5 Hz |
| Adjustment range of power factor | 0.8 cap to 0.8 ind |
| Total harmonic distortion (THD) | < 3% at rated apparent power |

| General Specifications | M8A |
|---|---|
| Delta model name | RPI M8A |
| Delta part number | RPI802FA0E1000 |
| Peak efficiency | 98.3% |
| Efficiency EU | 97.6% |
| 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 guarantee | 5 years (warranty extension available upon request) |

| Mechanical design | M8A |
|---|---|
| Physical dimensions (H x W x D) | 445 × 510 × 177 mm |
| Weight | 25 kg |
| Cooling | Natural convection, without fans |
| Mounting options | Wall mounting [5] |
| Disconnectors | 1x mechanical AC/DC disconnector |
| Connection type AC side | 1 AC plug Amphenol C16-3 [6] |
| Connection type DC side | 2 pairs DC plugs Multi-Contact MC4 [6] |

| Communication | M8A |
|---|---|
| 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 |

| Safety / Standards | M8A |
|---|---|
| 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 5.65 kW per DC input with asymmetrical load (40% / 60%)
3) Cos Phi = 1 (VA = W)
4) AC voltage and frequency range are programmed according to the respective country regulations.
5) Mounting plate included in scope of delivery
6) Included in scope of delivery

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