

Featuring:
6 MPP Trackers
Ideal for Commercial
Rooftop or Ground-
Mounted PV Systems



M70A

High efficiency three phase solar inverters for the EMEA market -
Perfect choice for large-scale solar PV systems, such as those
used in the commercial or utility sectors.

Versatile applications

- Aluminium housing ensures long lasting protection against moisture and corrosion
- Suitable for indoor and outdoor applications (IP65)
- Easy cooling fan module removal for cleaning
- Wireless Communication & RS-485
- iOS and Android App for quick commissioning
- Mechanical DC disconnectors
- 2*18 inputs
- Built-in AC & DC Type 2 SPDs, optional combination Type 1 + 2
- Fast installation design – wall-mount with bracket or direct install to the ground via two metal feet.

Maximum profitability

- Peak efficiency of 98.8%
- 6 MPP Trackers
- Individual string monitoring
- Maximum apparent power 77 kVA
- Wide input voltage range 200 ... 1000 V

Additional functions

- I-V Curve Function for PV system analysis
- Q at Night
- Anti-PID

77 kVA transformerless solar inverters

Technical data M70A

| INPUT (DC) | M70A |
|--|--|
| Max. voltage | 1100 V ¹⁾ |
| Voltage range | 200 ... 1000 V |
| MPP operating voltage range (full power) | 460 ... 900 V ²⁾ |
| Voltage range for nominal power | 460 ... 900 V |
| Nominal voltage | 600 V |
| Max. current | 156 A (6 x 26 A) |
| Night time consumption | < 2 W ³⁾ |
| Max. number of MPP trackers | 6 MPP trackers |
| Surge Protection Devices | Type 2, replaceable (EN 50539-11), optional combination Type 1 + 2 |

| OUTPUT (AC) | |
|---------------------------------|--|
| Max. apparent | 77 kVA / 77 kW ⁴⁾ |
| Nominal apparent power | 70 kVA ⁴⁾ |
| Voltage range | 400V -20% / +30% Y or Δ; ⁵⁾ 3 Phase + PE (Δ) oder 3 Phase + N + PE (Y) |
| Max. output current | 112 A |
| Nominal frequency | 50 / 60 Hz |
| Frequency range | 50 / 60 Hz ± 5 Hz ⁵⁾ |
| Power factor adjustable | 0.8 cap ... 0.8 ind |
| Total harmonic distortion (THD) | < 3% @ nominal apparent power |
| Surge Protection Devices | Type 2, replaceable (EN 61463-11), optional combination Type 1 + 2 |

GENERAL SPECIFICATION

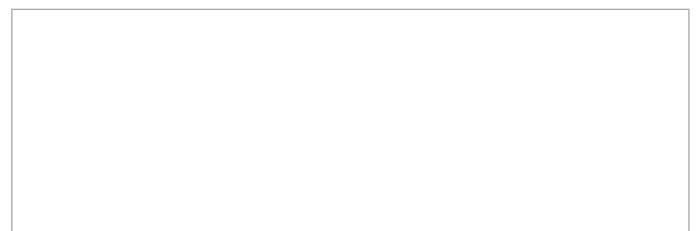
| | |
|--------------------------------|---|
| Model | M70A_260 |
| Delta part number | RP1703M260000 |
| Max. efficiency / EU eff. | 98.8% / 98.4% |
| Operating temperature | -25 ... +60 °C |
| Nominal power without derating | -25 ... +50 °C |
| Storage temperature | -25 ... +60 °C |
| Humidity | 0 ... 100 % non-condensing |
| Max. operating altitude | 4000 m (above sea level) |
| Standard guarantee | 5 years (guarantee extension is possible) |

MECHANICAL DESIGN

| | |
|--------------------------|--|
| Size (L x W x D) | 629 × 699 × 264 mm |
| Weight | 69 kg |
| Cooling | Fans with removable fan module |
| AC connection type | AC cable within 26 mm ² up to 120 mm ² (Cu wire) or within 70 mm ² up to 120 mm ² (Al wire) with lug terminals |
| DC connection type | 18 pairs of H4 DC connectors |
| Communication interfaces | RS485, dry contacts x 2, EPO x 1, VCC, Digital inputs x 6 |
| Communication | RS485, wireless communication |
| DC disconnectors | 6 x integrated mechanical DC disconnectors |
| Display | 3 LEDs, Data visualization via gateway / commissioning software |
| Installation type | Wall-mountable or ground-mountable with included brackets |

| SAFETY / STANDARDS | M70A |
|---|--|
| Protection degree | IP65 |
| Safety class | I |
| Configurable trip parameters | Yes |
| Insulation monitoring | Yes |
| Overload behavior | Current limitation, power limitation |
| Anti-islanding protection / Grid regulation | UTE C15-712 ERDF-RES-PRO_64E, VDE-AR-N 4110, VDE-AR-N 4105, EN50549-1/-2 |
| EMC | EN61000-6-2, EN61000-6-3, EN61000-3-11, EN61000-3-12 |
| Safety | IEC62109-1 / -2, CE compliance |

- 1) The max withstand voltage is 1100 Vdc. (the inverter starts to operate when the PV voltage drops below 1000 Vdc)
- 2) Ambient: < 35 °C : 460...900 V, < 40 °C: 460-800 V, < 50 °C: 520-720 V
- 3) Night time consumption with standby communication
- 4) Cos Phi = 1 (VA = W)
- 5) AC voltage and frequency range will be programmed according to the individual country requirements.



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