

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
- Sub-1G or WiFi (optional accessory) & RS-485
- iOS and Android App for quick commissioning with DC1
- Mechanical DC disconnectors
- 2*18 inputs
- Built-in AC & DC Type 2 SPDs, optional combination Type 1 + 2
- Fast installation design – wall-mount with supplied bracket or direct install to the ground via two metal feet (optional accessory item).

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
- Max. input voltage 1100 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 input voltage range at full power	520...800 V ²⁾
MPP input voltage range at rated power	460...900 V ³⁾
MPPT power (rated / max.)	13 kW / 15.7 kW
Rated voltage	600 V
Max. input current	156 A total (26 A per MPP tracker)
Night time consumption	< 2 W ⁴⁾
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 ⁵⁾
Nominal apparent power	70 kVA ⁵⁾
Voltage range	400V -20% / +30% Y or Δ; ⁶⁾ 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 ⁶⁾
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, Sub-1G technology and WiFi (optional accessory)
DC disconnectors	6 x integrated mechanical DC disconnectors
Display	3 LEDs, Data visualization via gateway / commissioning software
Installation type	Wall-mountable with supplied bracket or ground-mountable via two metal feet (optional accessory)

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: < 40 °C
- 3) Ambient: < 35 °C : 460...900 V, < 40 °C: 460...800 V, < 50 °C: 520...720 V
- 4) Night time consumption with standby communication
- 5) Cos Phi = 1 (VA = W)
- 6) AC voltage and frequency range will be programmed according to the individual country requirements.

Accessories

Delta Part Number	Description
3313587400-S	Ground mount bracket for M70A (2 needed)
5505501975-S	DC SPD type 1+2 for M70A
5505501976-S	AC SPD type 1+2 for M70A

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