

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

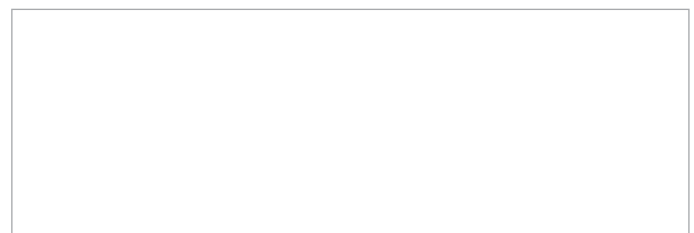
Model	M70A_260
Delta part number	RP1703M260000
Max. efficiency / EU eff.	98.8% / 98.4%
Operating temperature	-25 ... +60 °C
Nominal power without derating	-25 ... +50 °C
Storage temperature	-25 ... +60 °C
Humidity	0 ... 100 % non-condensing
Max. operating altitude	4000 m (above sea level)
Standard guarantee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

MECHANICAL DESIGN

Size (L x W x D)	629 x 699 x 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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