

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
- Communication via RS485
- iOS and Android App for quick commissioning with DC1
- Mechanical DC disconnectors
- 2 x 18 inputs
- Built-in AC & DC Type 2 SPDs, optional combined Type 1+2
- Fast installation design – wall-mount with 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 to 1000 V
- Maximum input voltage 1100 V

Additional functions

- I-V Curve Function for PV system analysis
- Reactive power feed-in 24/7
- Anti-PID

77 kVA Solar Inverters

Technical Data

INPUT (DC)	M70A
Max. input voltage	1100 V _{DC} ¹⁾
Input voltage range	200 to 1000 V _{DC}
MPP operating voltage range	
with maximum power	520 to 800 V _{DC} ²⁾
with nominal power	460 to 900 V _{DC} ³⁾
Nominal voltage	600 V _{DC}
Maximum current	156 A total, 26 A per MPP tracker
Night time consumption	< 2 W ⁴⁾
Max. number of MPP trackers	6
DC Surge Protection Devices	Type 2 (EN 50539-11) replaceable, optional combined Type 1+2

OUTPUT (AC)	
Max. power	77 kVA / 77 kW ⁵⁾
Nominal apparent power	70 kVA ⁵⁾
Output voltage range	400V -20% / +30% Y or Δ; ⁶⁾ 3 phases + PE (Δ) or 3 phases + N + PE (Y)
Max. output current	112 A
Nominal frequency	50 / 60 Hz
Frequency range	50 / 60 Hz ± 5 Hz ³⁾
Power factor range	0,8 capacitive to 0,8 inductive
Total harmonic distortion (THD)	< 3% at nominal apparent power
AC Surge Protection Devices	Type 2 (EN 61463-11) replaceable, optional combined Type 1+2

GENERAL SPECIFICATION

Delta model name	M70A_260
Delta part number	RPI703M260000
Maximum efficiency	98.8%
EU efficiency	98.4%
Operating temperature range	-25 to +60 °C
Operating temperature range without derating	-25 to +50 °C
Storage temperature range	-25 to +60 °C
Relative Humidity	0 to 100 %, non-condensing
Max. operating altitude	4000 m (above sea level)
Standard guarantee	5 years (guarantee extension is possible)
Topology	without transformer

MECHANICAL DESIGN

Dimensions (L x W x D)	699 × 629 × 264 mm
Weight	69 kg
Cooling concept	Removable fan module
AC connection type	Screw terminals; 35 to 120 mm ² (Cu); 60 to 120 mm ² (Al)
DC connection type	18 pairs of Amphenol H4 connectors
Communication interfaces	2 x RS485, 2 x dry contacts, 1 x EPO, 1 x 12 V _{DC} , 6 x digital inputs
Communication	RS485
Disconnectors	2 x integrated mechanical DC disconnectors
Operating status display	3 LED: On Grid, Communication, Alarm
Data visualization	via Gateway
Mounting options	Wall-mounting, Ground-mounting (optional)

solarsolutions.delta-emea.com

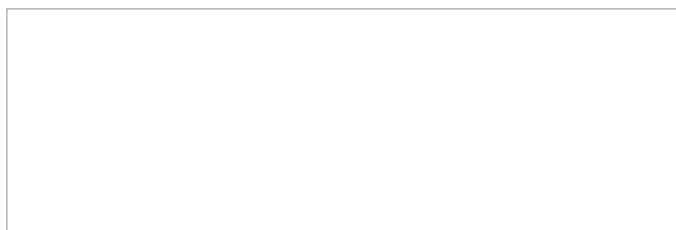
db_Delta_M70A_EN_2020-11-05 – All information and specifications are subject to change without notice

SAFETY / STANDARDS	M70A
Protection degree	IP65
Safety class	II
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	IEC 62109-1 / -2, CE conformity

- 1) Maximale input voltage without damaging. The inverters starts to operate when the input voltage drops below 1000 V_D.
- 2) Ambient temperature: < 40 °C
- 3) Ambient temperature: < 35 °C; at 35 to 40 °C: 460 to 900 V_{DC}; at 35 to 40 °C: 460 to 800 V_{DC}
- 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 pieces needed)
5505501975-S	DC Surge Protection Devices Type 1+2 for M70A
5505501976-S	AC Surge Protection Devices Type 1+2 for M70A



United Kingdom

sales.uk@solar-inverter.com
0800 051 4280 (Free Call)

International

sales.europe@solar-inverter.com
+49 7641 455 547

