



The power behind competitiveness

Delta Commercial Series

Grid PV Inverter

M6A / M8A / M10A



Product Features:

- Transformerless inverter
- Dual MPP Trackers
- High efficiency up to 98.3%
- Wide working voltage range
- Built-in AC/DC Switch
- DC relay protection
- Ultra light weight design
- IP65 Protection
- Wi-Fi / Ethernet (Optional)



Delta RPI M6A/M8A/M10A

Optional communication protocols



The inverter comes with standard RS485 communication port. Optional WiFi / Ethernet communication port can be easily enhanced and gives more convenience and flexibility in monitoring system design. For example, the free Delta Insight Power Monitoring webpage display the output data in a clear manner so that you can see how much solar energy the system is generating and has fed into the public grid at any time you want to see.

AC / DC Switch Protection



In order to ensure the safety during installation, the inverter equips with an AC/DC switch which is design to manually cut off both AC & DC power sources from internal circuit at the same time. When turn off the switch, the AC AUX Power inside will detect the movement, and internal DSP will execute AC protection mechanism program, and cut off AC relay & DC relay at the same time. Thus, the inverter will be completely power off which will prevent any possibility of installer getting an electric shock.

Safety protection

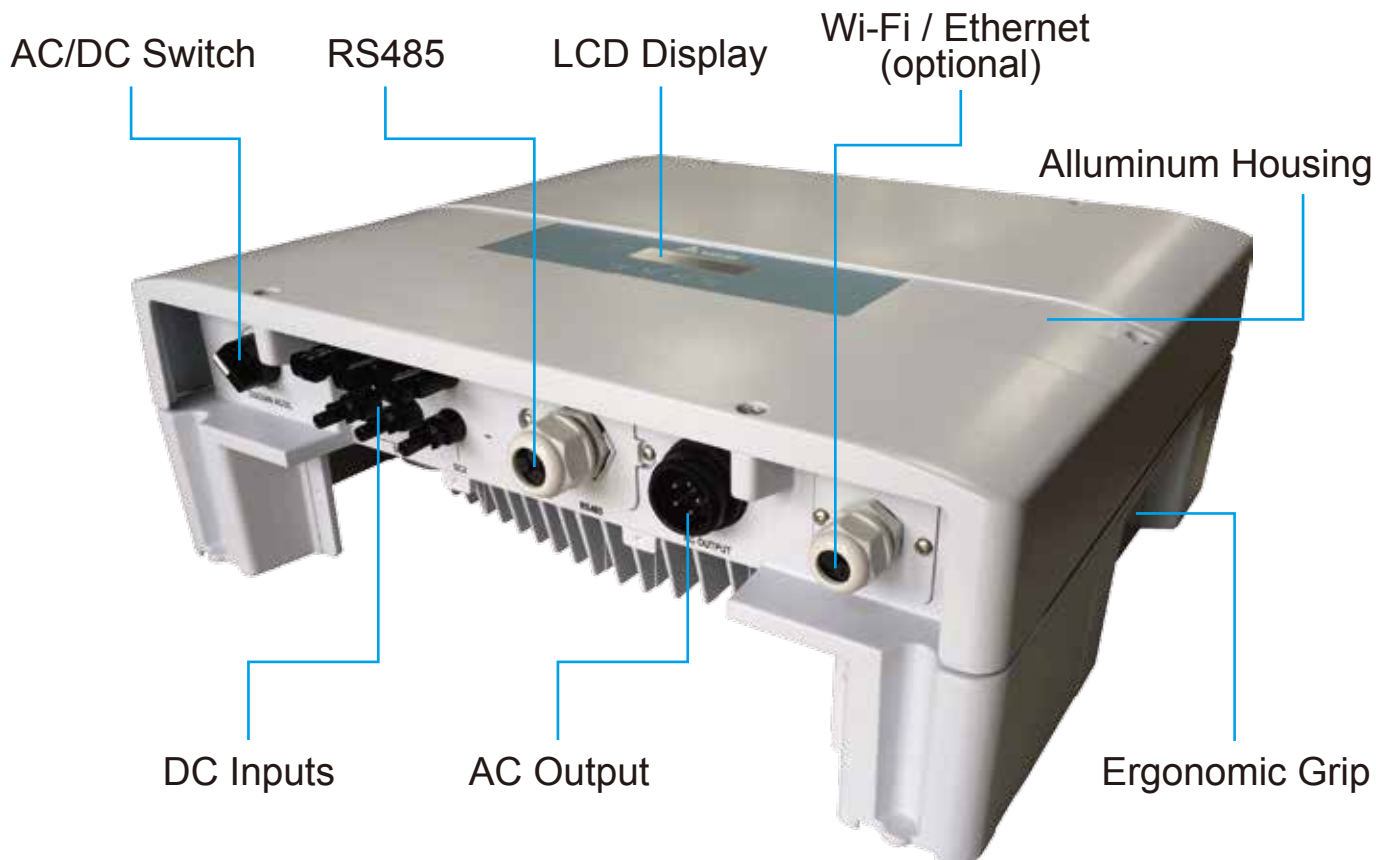
According to safety regulation, AC Relay is requested to be installed at AC output in the inverter. In this series of PV inverter, additional DC Relay is also available providing additional extra safety protection mechanisms.

For instance, when the inverter is not yet reached DC working voltage range, PV panel will not be able to feed in any energy to the inverter which to ensure the inverter during standby mode will not be damaged by any possible external causes.

In addition, if DSP detects abnormal voltage causes by capacitor, it will cut off DC Relay automatically to avoid from capacitor explosion which may direct to serious fire damage to the inverter or the entire PV system.



Delta RPI M10A



Compact in size & Fan-less Design

Ultra light weight design gives more flexibility and convenience, the entire installation process can be easily done by only one man using the mounting plate supplied.

Fast connection design is applied on both AC and DC connectors with less complication installation process which will result faster installation time.

The compact case design & high output density of the inverters minimize the required installation surface and reduces AC wiring, thereby further reducing installation costs.



High Quality Protection Design

M6A/M8A/M10A series is crafted in diecast tooling with durable casing and appearance of quality. IP65 protection level ensures the product life time in outdoor environment. Aluminum heat sink with intelligent cooling concept exhausts the heat efficiently out of the inverter which optimize the inverter performance and extend the life time of electronic components. All the connectors are well protected at the bottom of the case even inverter is placed vertically on the ground.

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RPI M6A / M8A / M10A

Technical Specifications

Model		RPI M6A	RPI M8A	RPI M10A
DC Input	Max. DC power	6.6kW	8.8kW	11kW
	Max. DC Voltage	1000V	1000V	1000V
	Recommended PV Power	<7.2kW	<9.6kW	<12kW
	Operating voltage range	200~1000V	200~1000V	200~1000V
	MPP voltage range, rated power	315~800V	415~800V	415~800V
	Start voltage	>250V	>250V	>250V
	Rated voltage	600V	600V	600V
	Max. input current	Each MPPT: 10A Total: 20A	Each MPPT: 10A Total: 20A	Each MPPT: 15A/10A Total: 25A
	MPP Tracker	2	2	2
	Connection Type	2 pairs of MC4	2 pairs of MC4	3 pairs of MC4
AC Output	Max. output power	6.3kW / 6.3kVA	8.4kW / 8.4kVA	10.5kW / 10.5kVA
	Max. output current	9.7A	13A	16A
	Rated Voltage	3Ph 230/400V Y or Δ	3Ph 230/400V Y or Δ	3Ph 230/400V Y or Δ
	Operating voltage range	±20%	±20%	±20%
	Operating frequency range	50/60Hz ± 5Hz	50/60Hz ± 5Hz	50/60Hz ± 5Hz
	Power factor	0.8 ind ~ 0.8 cap	0.8 ind ~ 0.8 cap	0.8 ind ~ 0.8 cap
	THD	<3%	<3%	<3%
	Night time consumption	<2W	<2W	<2W
Efficiency	Peak efficiency	98.3%	98.3%	98.3%
	Euro efficiency	97.6%	97.9%	98%
Information	DC Switch	DC relay	DC relay	DC relay
	Communication port	RS485 / WiFi Optional	RS485 / WiFi Optional	RS485 / WiFi Optional
	Display	20 x 4 LCD	20 x 4 LCD	20 x 4 LCD
Certification		VDE-AR-N 4105	VDE-AR-N 4105	VDE-AR-N 4105
		VDE 0126-1-1	VDE 0126-1-1	VDE 0126-1-1
		MEA / PEA	MEA / PEA	MEA / PEA
		AS4777	AS4777	AS4777
		IEC 62109-1/-2	IEC 62109-1/-2	IEC 62109-1/-2
		IEC 61000-6-2	IEC 61000-6-2	IEC 61000-6-2
		IEC 61000-6-3	IEC 61000-6-3	IEC 61000-6-3
General Data	Operating temperature range	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C
	Protection Level	IP65	IP65	IP65
	Operating elevation	<2000M	<2000M	<2000M
	Dimension (W x H x D, mm)	510 x 445 x 177	510 x 445 x 177	510 x 445 x 177
	Weight (kg)	25 kg	25 kg	25 kg

All specifications are subject to change without prior notice.

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