



The power behind competitiveness

Delta RPI-Commercial Series

Grid PV Inverter

RPI - M8 / M10 / M12



Product Features

- Transformerless design
- Dual MPP Trackers
- Peak efficiency 98.4%
- Ergonomics handle design
- 5" graphic LCD display
- 6 languages option display
- Built-in Energy-logger & Data-logger
- IP65 protection level
- Durable & light weight design
- Built-in DC switch



Delta Grid PV Inverter

Your Best renewable solution

Delta RPI M8 / M10 / M12 transformerless PV inverter converts the sunlight energy generated by solar panels into grid-compatible current. Delta's industrial cutting-edge technology presents the industrial leading efficiency as high as 98.3% and durable quality PV inverter to ensure your PV system operation.



High Quality Enclosure

Convection cooled aluminum housing is designed with 2 separate compartments for electronic components and air cooling purposes in order to emit the heat more efficiently. IP65 rated enclosure and corrosion resistant features ensure the inverter protection in both indoor and outdoor environment. DC input adopts the MC4 fast connects which allows easy plug in during installation.



Flexibility in rooftop / ground applications

Outstanding compact size of Delta RPI-M8/10/12 3 phase PV inverters gives high flexibility to different applications in rooftop or ground solar systems. It is designed in string inverter concept by having the most compact size with high level IP65 protection. It is flexible in rooftop solar solution without limited by obstacles on rooftop, and also in large scale solar power plant site.

More flexibility is given to site planning, construction & maintenance due to RPI-Commercial PV inverter's compact size and light weight.

Dual MPPT trackers enable PV system facing different directions while getting maximum sun radiation & perform at max efficiency.



Easy Installation & Swappable feature

Installation of RPI-Commercial series is easy and safe with fast plug connection design. This helps to speed up the installation and save the installation costs.

The unit has vertical die-casting cooling heat sink and additional cooling fan module below enhance air circulation, bringing down the unit temperature to maintain system performance.

Cooling fan module below inverter is designed with easy swappable feature. User can simply unscrews and withdraw the cooling fan module to replace single fan if necessary.

Smart Communication & Logger

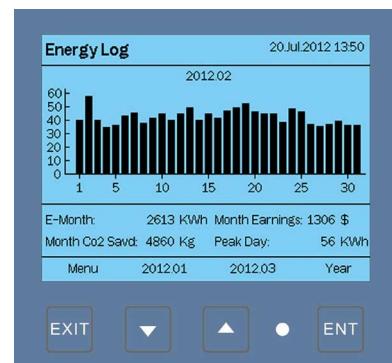
5" LCD brings all the relevant system information and settings in graphics display. Easy to use push button interface to access all important data stored inside the built-in data logger. Logger will automatically save the electricity information generated by solar system in several periods of time.

Power generation record every 5 minutes will be saved for one day.

Power generation record every 15 minutes will be saved for one month.

Daily total power generation info will be saved in the system for one year.

Monthly total power generation info will be saved in the system for 10 years.



High Efficiency Performance

Transformerless topology design gives high peak efficiency up to 98.3% delivering more usable energy. Two sets of MPPT optimize power from multiple arrays oriented in different directions. This optimized energy harvesting can provide user the maximum pay-back solar system.

Multiple Max Power Point Trackers

2 sets of MPPTs optimize power harvesting from multiple arrays oriented in different directions. The inverter will track the optimal power point for each of the two arrays independently. Both inputs can be combined and used with a single array as well.

Ultra Wide Working Voltage Range

Wide working operating voltage range from 200V up to 1000V is making module configuration more flexible. Even under cold environment, wide MPPT range makes it easy to configure PV arrays and stay within range.

Delta RPI-Commercial Series

RPI - M8 / M10 / M12

Technical Specifications

Model		RPI-M8	RPI-M10	RPI-M12
DC Input	Max. DC voltage	1000V	1000V	1000V
	Operating voltage range	200~1000V	200~1000V	200~1000V
	MPP voltage range	280V~850V	350~850V	416~850V
	Start voltage	>250V	>250V	>250V
	Rated voltage	635V	635V	635V
	Max. input current	Each MPPT: 20A Total: 30A	Each MPPT: 20A Total: 30A	Each MPPT: 20A Total: 30A
	MPP tracker	2	2	2
	Connection type	4 pairs MC4	4 pairs MC4	4 pairs MC4
	AC Output	Max. output power	8400VA	10500VA
Max. output current		12.8A	16A	19.2A
Rated voltage		3Ph 230/400V	3Ph 230/400V	3Ph 230/400V
Operating voltage range		±20%	±20%	±20%
Operating frequency range		50/60Hz ±5Hz	50/60Hz ±5Hz	50/60Hz ±5Hz
Power factor (adjustable)		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	97.4%	97.7%	97.7%
Information	DC Switch	YES	YES	YES
	Communication port	RS485	RS485	RS485
	Display	5" LCD	5" LCD	5" LCD
	Built-in energy logger	YES	YES	YES
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
		RD1699	RD1699	RD1699
		CEI 0-21	CEI 0-21	CEI 0-21
		AS4777	AS4777	AS4777
		IEC 62109-2	IEC 62109-2	IEC 62109-2
		EN 61000-6-2 EN 61000-6-3	EN 61000-6-2 EN 61000-6-3	EN 61000-6-2 EN 61000-6-3
General Data	Operating temp. range	-20~60°C	-20~60°C	-20~60°C
	Protection level	IP65	IP65	IP65
	Operating elevation	<2000m	<2000m	<2000m
	Dimension (W x H x D, mm)	612 x 625 x 278	612 x 625 x 278	612 x 625 x 278
	Weight	40kg	40kg	40kg

* Night time consumption includes backlight & communication.
- All specifications are subject to change without prior notice.

DELTA ELECTRONICS, INC.

39 Section 2 Huandong Road,
Shanhua Township,
Tainan County 74144, Taiwan, R.O.C.
TEL 886-6-5056565
FAX 886-6-5051919
<http://www.deltaww.com>

