



The power behind competitiveness

# Delta RPI-Commercial Series

Grid PV Inverter

RPI - M15A / M20A / M30



## Product Features

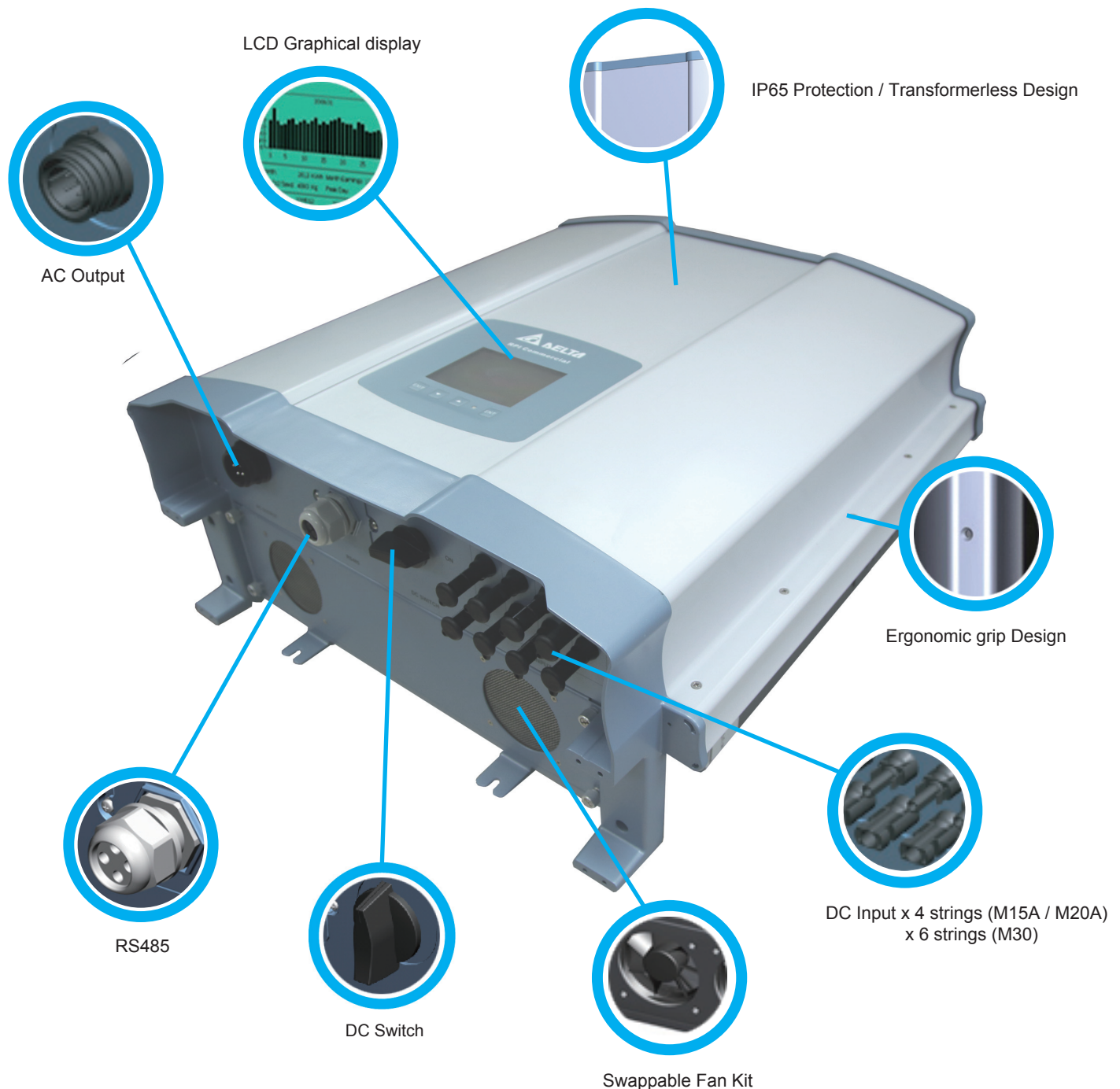
- Transformerless design
- Dual MPP Trackers
- Peak efficiency 98.4%
- Ergonomics handle design
- 5" graphic LCD display
- 6 languages option display
- Built-in Energy-logger & Data-logger
- IP65 protection level
- Durable & light weight design
- Built-in DC switch



# Delta Grid PV Inverter

## Your Best renewable solution

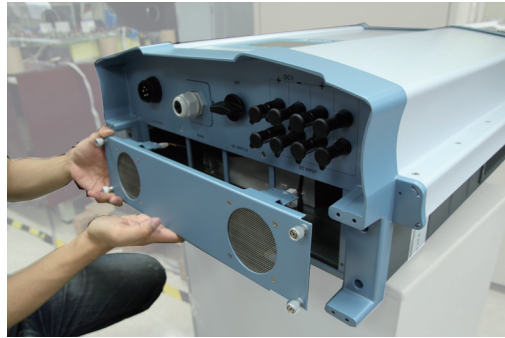
Delta RPI - Commercial series of transformerless PV inverter converts the sunlight energy generated by solar panels into grid-compatible current. Delta's industrial cutting-edge technology presents the industrial leading efficiency as high as 98.4% with the most compact size design and durable quality 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-Commercial 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 MPP 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

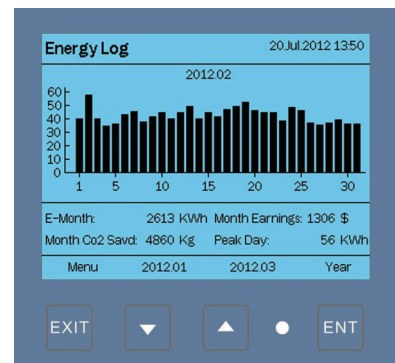
5" LCD brings all the relevant system information and settings in graphics display. Easy to use push button interface to access all important data stored inside the built-in data logger. Logger will automatically save the electricity information generated by solar system in several periods of time.

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 98.4% 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 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.

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## Technical Specifications

Model		RPI-M15A	RPI-M20A	RPI-M30
DC Input	Max. input voltage	1000V	1000V	1000V
	Operating voltage range	200~1000V	200~1000V	200~1000V
	MPP voltage range	355~820V	470~820V	480~800V
	Start voltage	>250V	>250V	>250V
	Rated voltage	635V	635V	650V
	Max. input current	Each MPPT: 22A Total: 44A	Each MPPT: 22A Total: 44A	Each MPPT: 34A Total: 68A
	MPP tracker	2	2	2
	Connection type	4 pairs MC4	4 pairs MC4	6 pairs MC4
AC Output	Max. output power	15750VA	21000VA	31500VA
	Max. output current	24A	32A	46A
	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 (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	98.30%	98.40%	98.20%
	Euro efficiency	97.90%	98.10%	97.60%
Information	DC Switch	YES	YES	YES
	Communication port	RS485	RS485	RS485
	Display	5" LCD	5" LCD	5" LCD
Certification		VDE-AR-N 4105	VDE-AR-N 4105	VDE-AR-N 4105
		VDE 0126-1-1/A1	VDE 0126-1-1/A1	VDE 0126-1-1/A1
		BDEW	BDEW	BDEW
		MEA / PEA	MEA / PEA	MEA / PEA
		AS4777 & 3100	AS4777 & 3100	AS4777 & 3100
		NB/T 32004: 2013	NB/T 32004: 2013	NB/T 32004: 2013
		IEC 62109-1/-2	IEC 62109-1/-2	IEC 62109-1/-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	-25~60°C	-25~60°C	-25~60°C
	Protection level	IP65	IP65	IP65
	Operating elevation	<2000m	<2000m	<2000m
	Cooling	OptiCool	OptiCool	OptiCool
	Dimension (W x H x D, mm)	612 x 625 x 278	612 x 625 x 278	612 x 960 x 278
	Weight	43kg	43kg	72kg

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