



The power behind competitiveness

Delta M30A & M50A

Grid PV Inverter
M30A & M50A

Product Features

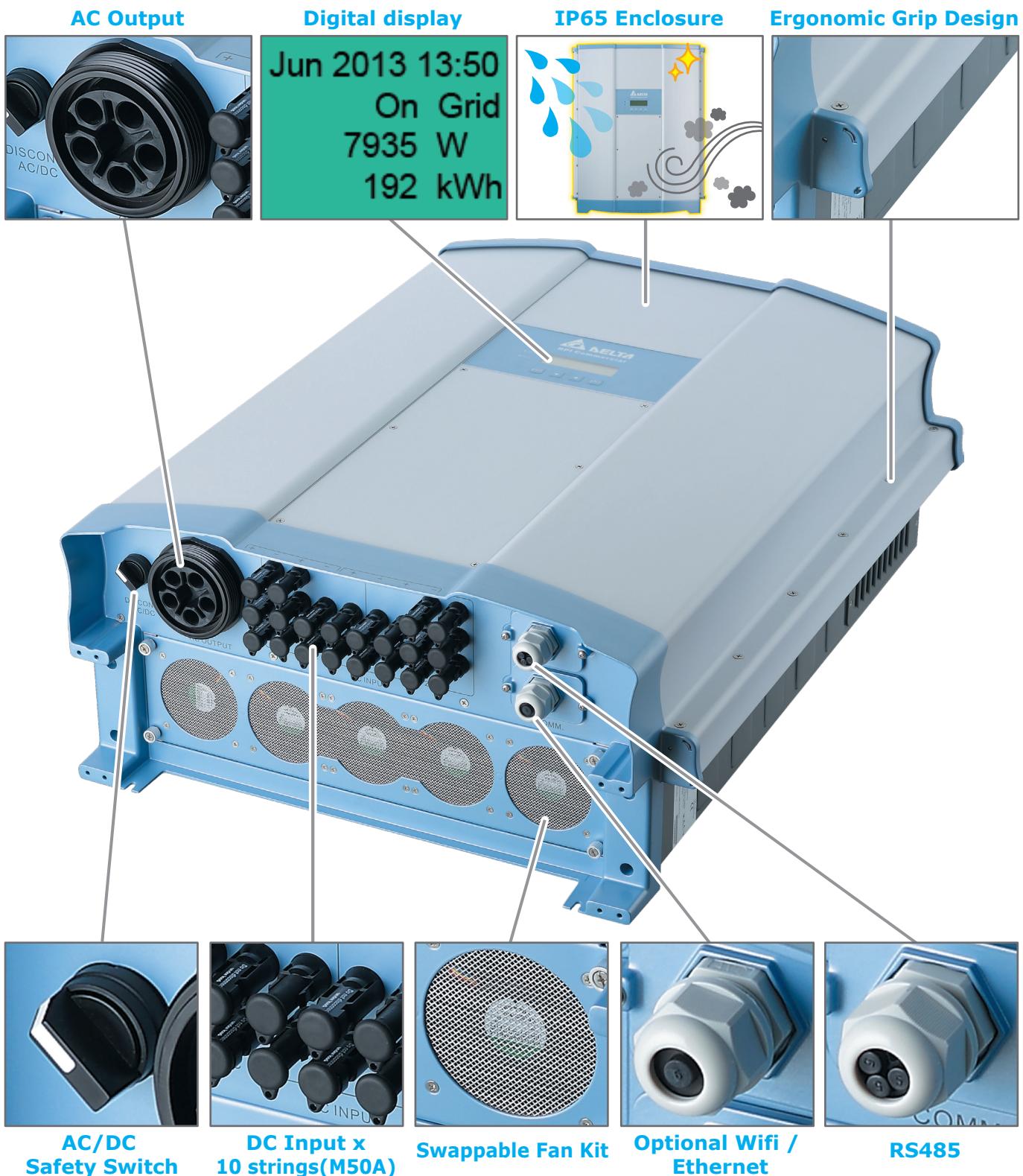
- Transformerless inverter
- Dual MPP Trackers
- Peak efficiency up to 98.6%
- Connect up to 10 strings PV arrays
- Easy & fast connection
- Ergonomics handle design
- Ultra compact size
- Built-in Energy-logger
- IP65 protection level
- Optional wifi / ethernet
- Built-in DC switch
- Built-in string fuses



Delta M30A & M50A

The smallest & lightest 30kW&50kW inverter in the world

Delta's latest revolutionary design "M30A & M50A" transformerless PV inverter is the lightest,smallest, and first wall mount-able 30kW & 50kW inverter in the world. With such compact size and light weight, RPI M30A & M50A has more flexibility for different large scale PV systems & applications. IP65 enclosure provides higher level of protection and enhances its durability in outdoor environment.



Design Features

Thoughtful grip design

Ergonomic grip design gives more convenience while moving the inverter during installation. With special handle protection design, M30A&M50A can be easily placed down on the flat ground vertically without damaging various connectors at the bottom. Wall mountable & AC/DC fast connection design provides great flexibility and convenience during installation.



Protection Features



AC / DC safety switch

Integrated safety switch could shut-down the inverter immediately, DC & AC relays directly shut down connections by CPU to ensure completed disconnection and easy recovering. Remote shut down feature is also available that allows site manager to activate/disconnect PV energy instantly.

Built-in SPD & String fuses

Inside each individual string connector integrated with internal string fuse that protects each of PV array string and is replaceable. Delta M50A has built-in & replaceable AC/DC SPD(Surge Protection Devices) to prevent thunder strikes & surge from your PV system.



(Surge Protection Devices)



(String fuses)



Outstanding performance

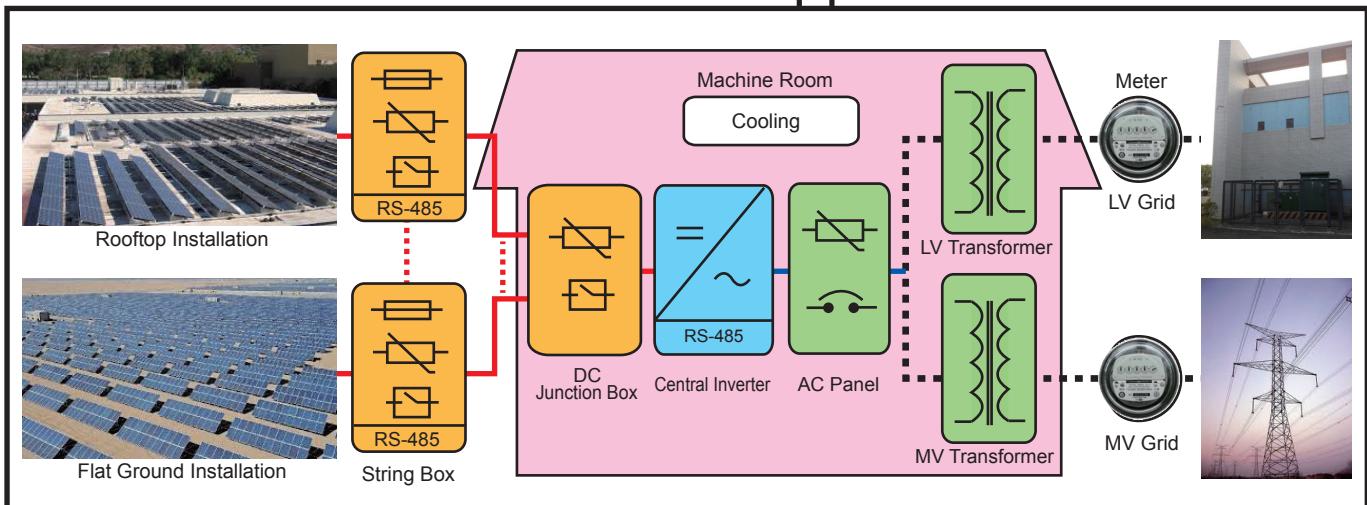
Delta M30A&M50A is able to reach 98.5% & 98.6% peak efficiency, 98.2% & 98.4% Euro-efficiency over converting PV energy. 2 sets of MPP allows more flexibility when PV arrays are facing different directions while minimizing energy losses and maximizing higher yields.



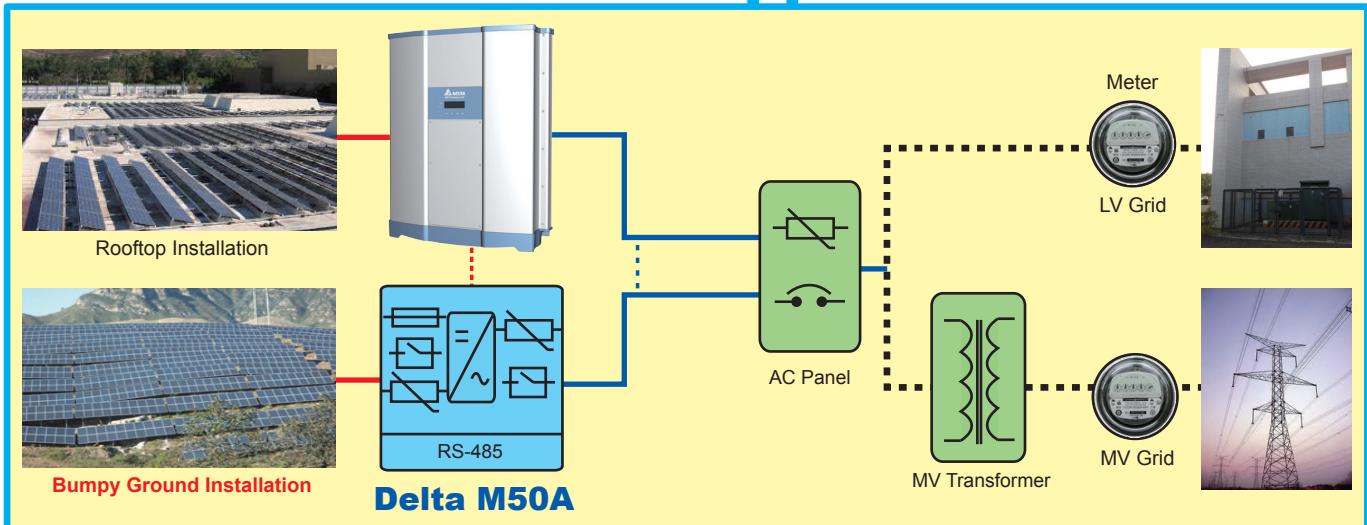
PV System Comparison



Central Inverter Application



Delta 50kW Application



Savings with M30A & M50A

Saving on System Cost :

All-in-one design with integrated string box / fuses / surge protection devices / DC & AC switches.

Saving on Space Cost :

No Engine room is required for storing inverters AC conditioners and transformers. M30A & M50A can be mounted on the rack right behind the PV panels.

Saving on DC Cable Cost :

With built-in string box feature and up to max.10 strings connection, less DC cables will be used during field installaton.

Saving on Installation cost :

Easy installation with convenient AC & DC plug connections providing quick and easy connection. Less installation time & less auxiliary units are required.

Dual MPPTs :

Sweep function can get real maximum power of PV array even when get shaded from the clouds or shadows. Contributing maximum yields with minimum efforts.



Delta Commercial Series

RPI M30A / M50A

Technical Specifications

Model		M30A_120	RPI M50A_120
DC Input	Max. DC input	35 kW	58 kW
	Max. input voltage	1000V	1000V
	Recommended PV Power	≤38kW	≤63kW
	Operating voltage range	200~1000V	200~1000V
	MPP voltage range, Full power	520~800V	520~800V
	Start voltage	>250V	>250V
	Rated voltage	600V	600V
	Max. input current	Each MPPT: 30A Total: 60A	Each MPPT: 50A Total: 100A
	MPP tracker	2	2
	Connection type	6 pairs MC4	10 pairs MC4
	Protection	15A fuse per string + & -, Type2 SPD	15A fuse per string + & -, Type2 SPD
AC Output	Rated output power	30kW / 30kVA	50kW / 50kVA
	Max. output power	33kW / 33kVA*	55kW / 55kVA*
	Max. output current	50A	80A
	Rated voltage	3Ph 230/400V Y or Δ	3Ph 230/400V Y or Δ
	Operating voltage range	±20%	±20%
	Operating frequency range	50/60Hz ±5Hz	50/60Hz ±5Hz
	Power factor (adjustable)	0.8 ind ~ 0.8 cap	0.8 ind ~ 0.8 cap
	Protection	Type 2 SPD	Type 2 SPD
	THD	<3%	<3%
	Night time consumption**	<3W	<2W
Efficiency	Peak efficiency	98.5%	98.6%
	Euro efficiency	98.2%	98.4%
Information	DC Switch	DC Relays	DC Relays
	Communication port	RS485	RS485
	Display	20 x 4 LCD	20 x 4 LCD
Certification	VDE-AR-N 4105	VDE-AR-N 4105	
	VDE 0126-1-1	VDE 0126-1-1	
	BDEW	BDEW	
	NB/T 32004: 2013	NB/T 32004: 2013	
	GB/T 19964: LVRT	GB/T 19964: LVRT	
	IEC 62109-1/-2	IEC 62109-1/-2	
	EN 61000-6-2	EN 61000-6-2	
	EN 61000-6-3	EN 61000-6-3	
	-	-	
	-	-	
General Data	Operating temp. range	-25~60°C (Derating above 45°C)	-25~60°C
	Protection level	IP65	IP65
	Operating elevation	<2000m	<2000m
	Cooling	Cooling fans	Cooling fans
	Dimension (W x H x D, mm)	612 x 625 x 278	612 x 740 x 278
	Weight	48.5kg	74kg
	Container loading	20ft 84pcs 40ft 168pcs	20ft 72pcs 40ft 144pcs

* M30A : Max. output power at ≤25°C, de-rating to 30kW / 30kVA at 40°C

* M50A : Max. output power at ≤25°C, de-rating to 50kW / 50kVA at 40°C

**Night time consumption with standby communication & display

- All specifications are subject to change without prior notice.

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