

Delta Series UM 4-5K-48

OFF-GRID INVERTER WITH STORAGE ENERGY



Features

Flexible Communications

- Integrated LCD display.
- Built-in bluetooth communication.
- Remote control & firmware upgrade.

Adaptive

- Configurable AC/solar input priority based on applications.
- Parallel operation up to 10 units (50kW).
- Support 3 phase unbalanced parallel operation.
- Intelligent EMS function.

High Performance

- 80 Amp AC charger and 100 Amp solar charger.
- Maximum PV input voltage up to 500VDC.
- Built-in MPPT solar charge controller.

Battery Friendly

- Compatible with all top-tier brands of lithium batteries and lead-acid batteries.
- Battery equalization for increased battery performance and lifespan.
- Functional with or without a battery.
- One-click fast charging mode.
- Manual wakeup the overdischarged battery to extend battery lifespan.

Technical Specifications

MODEL	4K-48	4K-48 Top	5K-48	5K-48 Top
Parallel Capability	No	Yes, 10 units	No	Yes, 10 units
BATTERY				
Rated Battery Voltage	48V			
Battery Type	Li-ion/Lead-acid			
Max. Charge/Discharge Current	100A			
Communication	CAN/RS-485			
INVERTER OUTPUT				
Rated Output Power	4kVA/4kW		5kVA/5kW	
Rated Output Voltage	230V ± 1%			
Rated Frequency	50/60Hz ± 0.1%			
Surge Capacity	8kVA		10kVA	
Output Voltage Waveform	Pure sine wave			
Transfer Time	10 ms typical, 20 ms Max			
THDv (@linear load)	< 3%			
Peak Efficiency (PV-AC)	96.7%			
SOLAR CHARGER				
Solar Chager Type	MPPT			
Recommended Max. PV Power	5kW		5.5kW	
Maximum Input Voltage	500V			
MPPT Voltage Range	90-480V			
MPPT No./Max.Input Strings No.	1/2			
Max. Input Current per MPPT	26A ⁽¹⁾			
Max. Solar Charge Current	100A			

Technical Specifications

MODEL	Delta UM 4K-48	Delta UM 4K-48 Top	Delta UM 5K-48	Delta UM 5K-48 Top
AC CHARGER				
Rated Input Voltage	230V			
Selectable Voltage Range	90-280V			
AC Frequency Range	50/60Hz (Auto sensing)			
Maximum AC Charge Current	60A		80A	
PROTECTION				
Output Over Voltage Protection	Yes			
Output Over Current Protection	Yes			
Short Circuit Protection	Yes			
Surge Protection	Yes			
Temperature Protection	Yes			
Integrated AFCI (DC arc-fault circuit protection)	Yes			
GENERAL DATA				
Dimensions (W*H*D)	335*450*160 mm			
Weight	14kg			
Relative Humidity	5% to 95% (Non-condensing)			
Operating Ambient Temperature Range	-10 ~ 60°C			
Storage Temperature Range	-25 ~ 60°C			
Ingress Protection	IP21			
Maximum Operation Altitude	2000 m			
Safety Standard	IEC 62109, IEC 61000			
FEATURES				
DC Connection	Terminal connectors			
AC Connection	Terminal connectors			
Display	LCD			
Communication	CAN, BMS, RS-485, Dry-contact, Bluetooth, Optional: Wi-Fi			

⁽¹⁾ Max. input current per string will be 26A for one string's design and 13A for two strings' design;

Max. input short current per string will be 32A for one string's design and 16A for two strings' design.

Product specifications are subject to change without further notice.