

## Delta Series UM 4-5K-48

OFF-GRID - ENERGY STORAGE INVERTER



### 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
<b>BATTERY</b>				
Rated Battery Voltage	48V			
Battery Type	Li-ion/Lead-acid			
Max. Charge/Discharge Current	100A			
Communication	CAN/RS-485			
<b>INVERTER OUTPUT</b>				
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%			
<b>SOLAR CHARGER</b>				
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 <sup>(1)</sup>			
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
<b>AC CHARGER</b>				
Rated Input Voltage	230V			
Selectable Voltage Range	90-280V			
AC Frequency Range	50/60Hz (Auto sensing)			
Maximum AC Charge Current	60A		80A	
<b>PROTECTION</b>				
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			
<b>GENERAL DATA</b>				
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			
<b>FEATURES</b>				
DC Connection	Terminal connectors			
AC Connection	Terminal connectors			
Display	LCD			
Communication	CAN, BMS, RS-485, Dry-contact, Bluetooth, Optional: Wi-Fi			

<sup>(1)</sup> 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.