

MPPT Solar charge controller

eTracer series



eTracer is an industrial grade product with advanced Maximum Power Point Tracking (MPPT) algorithm. It can deliver the maximum available power for charging batteries and charge a lower nominal voltage battery from a higher nominal voltage array. And can be applied in the off-grid PV systems up to 3KW. The die-cast aluminum design ensures excellent heat dispersion.



Models:

ET4415BND 45A, 12V/24V/36V/48V auto work

ET6415BND 60A, 12V/24V/36V/48V auto work

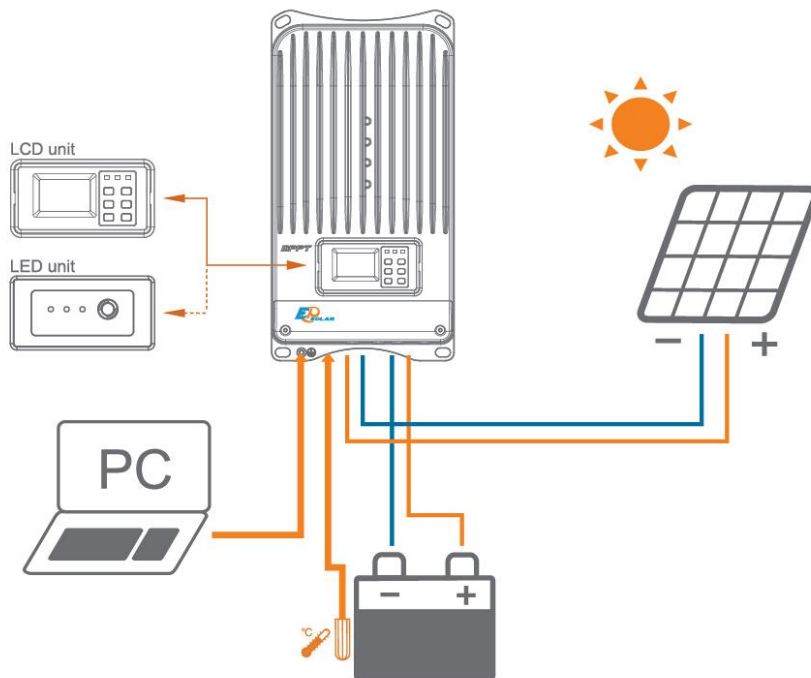
Features:

- ◆ Advanced MPPT technology, with efficiency no less than 99.5%
- ◆ Maximum conversion efficiency of 98% and full load efficiency of 97%
- ◆ MSRT, realizing high conversion efficiency in the situation of low charge power
- ◆ Ultra-fast tracking speed and guaranteed tracking efficiency
- ◆ Accurately recognizing and tracking of multiple power points
- ◆ Reliable automatic limit function of maximum PV input power, ensuring no overload under any circumstance

- ◆ Wide MPP operating voltage range
- ◆ High-speed and high-powered dual-core processor architecture, improving system response speed, optimizing system performance
- ◆ Die-cast aluminum case for heat dissipating, ensuring excellent heat dissipation characteristic
- ◆ 12/24/36/48VDC automatically identifying system voltage or user-defined working voltage
- ◆ Concise human-computer interactive interface, convenient multiple combination keys, dynamically displaying system operating data and working condition
- ◆ Support 4 charging options: Sealed, Gel, Flooded and User
- ◆ Battery temperature compensation function
- ◆ Real-time energy statistics function
- ◆ With RS-485, RS-232 communication bus interface and Modbus communication protocol, it is available to meet various communication requirements in different situations
- ◆ Available for PC monitoring and external display unit connecting like MT50 and so on, realizing real-time data checking and parameters setting
- ◆ Support software upgrade

Electronic protections:

- | | |
|-------------------------------------|---------------------------------------|
| ◆ PV short circuit protection | ◆ PV over current alarm protection |
| ◆ PV reverse polarity protection | ◆ Battery over voltage protection |
| ◆ Battery over discharge protection | ◆ Battery reverse polarity protection |
| ◆ Battery overheating protection | ◆ Controller overheating protection |





Accessories :

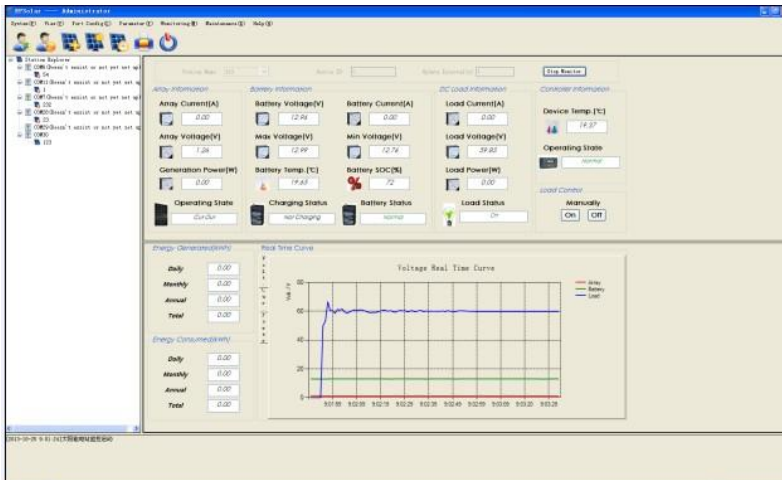


Remote temperature sensor
RTS300R10K5.08A



PC communication cable
CC-USB-RS485-150U-3.81

PC software:



Display interface:



Technical specifications

Model	ET4415BND	ET6415BND
Nominal system voltage	12/24/36/48V auto work	
Rated battery current	45A	60A
Max. PV open circuit voltage	150V at minimum operating environment temperature 138V at 25°C environment temperature	
MPP Voltage range	Battery voltage+2V~108V	
Max. PV input power	600W (12V)	800W (12V)
	1200W (24V)	1600W (24V)
	1800W (36V)	2400W (36V)
	2400W (48V)	3200W (48V)
Self-consumption	1.4~2.2W	
Equalize charging voltage	Sealed: 14.6V, Flooded: 14.8V, User-defined: 9~17V	
Boost charging voltage	Gel: 14.2V, Sealed: 14.4V, Flooded: 14.6V, User-defined: 9~17V	
Float charging voltage	Gel /Sealed /Flooded: 13.8V, User-defined: 9~17V	
Low voltage reconnect voltage	Gel /Sealed /Flooded: 12.6V, User-defined: 9~17V	
Low voltage disconnect voltage	Gel /Sealed /Flooded: 11.1V, User-defined: 9~17V	
Grounding	Common negative	

* Technical data for 12V system at 25°C

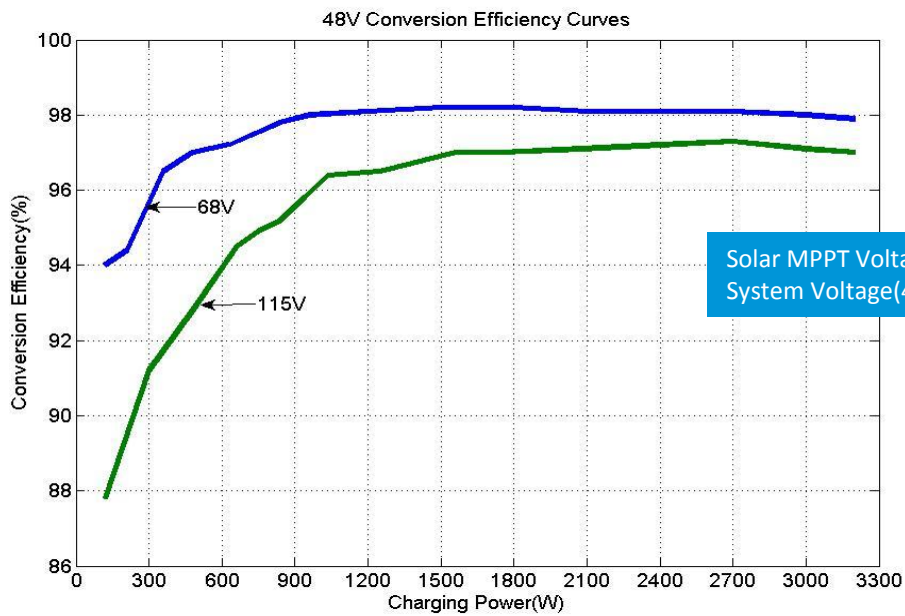


Mechanical	ET4415BND	ET6415BND
Overall dimension	398.6x208x107mm	449x208x107mm
Terminal	35mm ²	35mm ²
Net Weight	4.3kg	5.5kg

Environmental	
LCD temp. range	-20°C ~ +70°C
Ambient temp. range	-25°C ~ +50°C
Storage temp. range	-30°C ~ +85°C
Humidity range	≤95% N.C.
Enclosure	IP20

Conversion efficiency curves:

Illumination Intensity: 1000W/m² Temperature: 25°C Test model: ET6415BND



Solar MPPT Voltage(68V,115V) / System Voltage(48V)



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