

# MPPT Solar charge controller

## New eTracer series



New 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

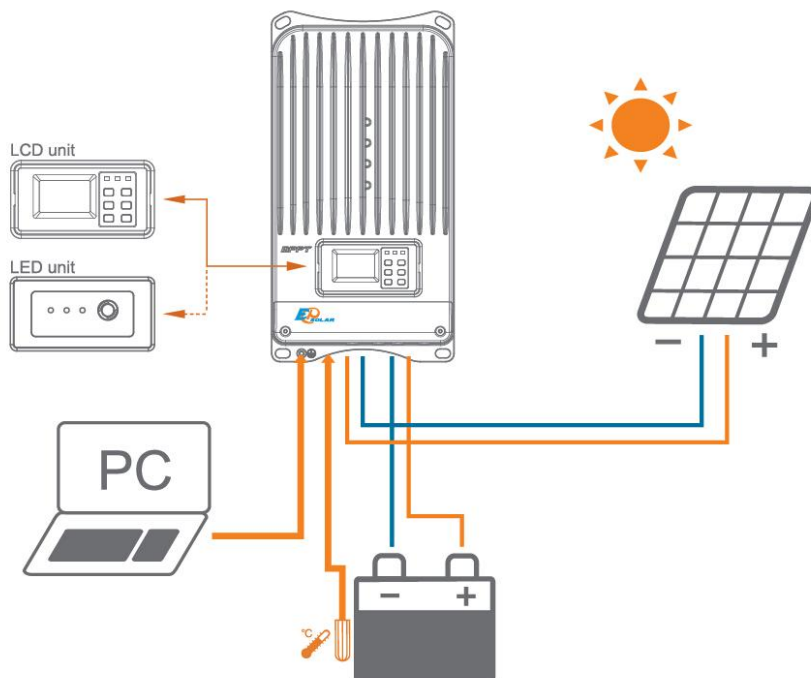
### Features:

- ◆ Advanced MPPT algorithm with the max. tracking efficiency of 99%.
- ◆ Multi-phase synchronous rectification technology realizing peak conversion efficiency 98%
- ◆ Dual-core(ARM CPU+DSP) control architecture improves the system response speed and optimizes the performance of the system
- ◆ Multiphase control technology, optimizes charging current smoothness, reduces ripple and improves the system efficiency

- ◆ 128\*64 dot-matrix LCD intuitively displays data and state, 6 buttons combinations for easy operation
- ◆ Four battery type options: Sealed, Gel, Flooded and User-defined
- ◆ Energy statistics recording, it is convenient for users to view charging and discharging energy of each day, month, year and total value.
- ◆ Diversified load control mode
- ◆ Programmable battery management parameters
- ◆ Built-in running data and event logging, max. 15 months
- ◆ Extensive communication capabilities (RS232,RS485 with Modbus protocol, CAN Bus extendable)
- ◆ PC software available for real time monitoring and parameter setting
- ◆ Field upgradable firmware

### Electronic protections:

- ◆ PV short circuit protection
- ◆ PV over current alarm protection
- ◆ Battery overcharge protection
- ◆ Battery reverse polarity protection
- ◆ PV overvoltage alarm protection
- ◆ PV reverse polarity protection
- ◆ Battery over discharge protection
- ◆ Overheating protection





### Accessories :

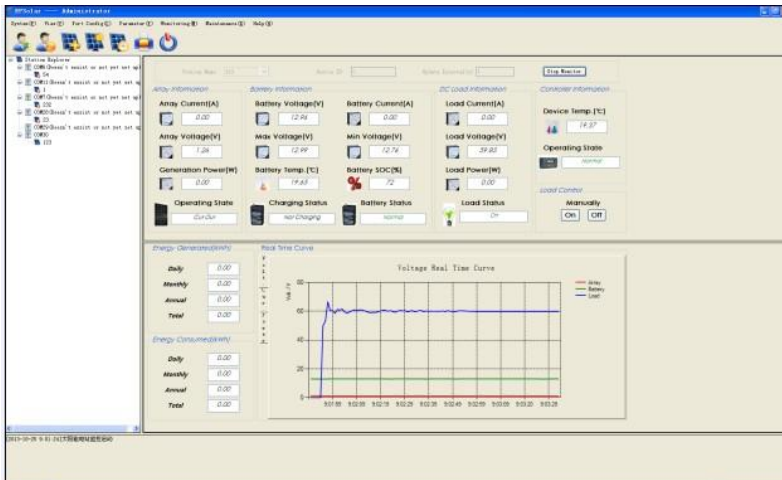


Remote temperature sensor  
RTS300R10K5.08A



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	
Voltage range	8~72V	
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

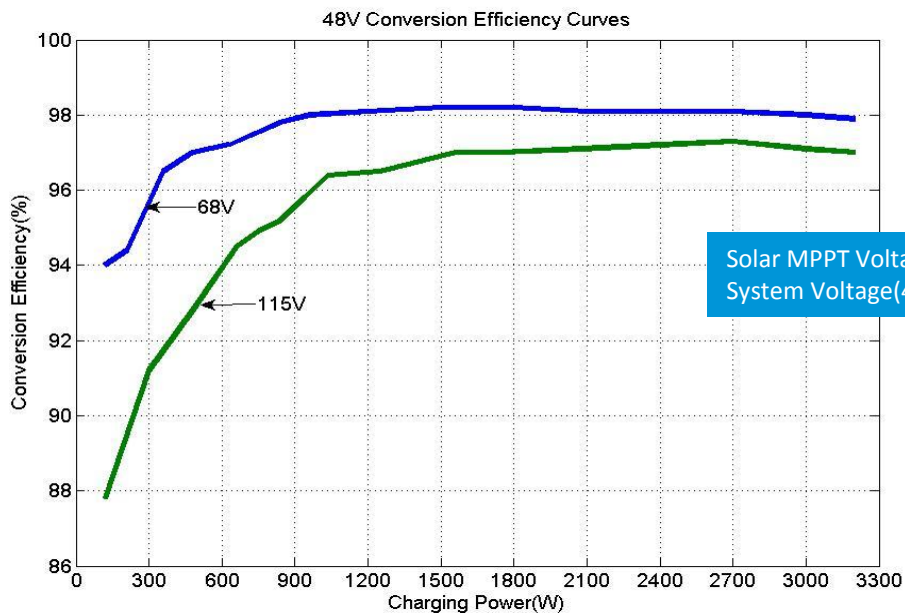


Mechanical	ET4415BND	ET6415BND
Overall dimension	398.6x208x107mm	449x208x107mm
Terminal	35mm <sup>2</sup>	35mm <sup>2</sup>
Net Weight	4.3kg	5.5kg

Environmental	
LCD temp. range	-20°C ~ +70°C
Ambient temp. range	-25°C ~ +55°C
Storage temp. range	-30°C ~ +85°C
Humidity range	≤95% N.C.
Enclosure	IP20

### Conversion efficiency curves:

Illumination Intensity: 1000W/m<sup>2</sup>    Temperature: 25°C    Test model: ET6415BND



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