MPPT Solar charge controller with load control

iTracer series

iTracer 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：

IT3415ND, IT4415ND, IT6415ND

30A,45A,60A

12V/24V/36V/48V

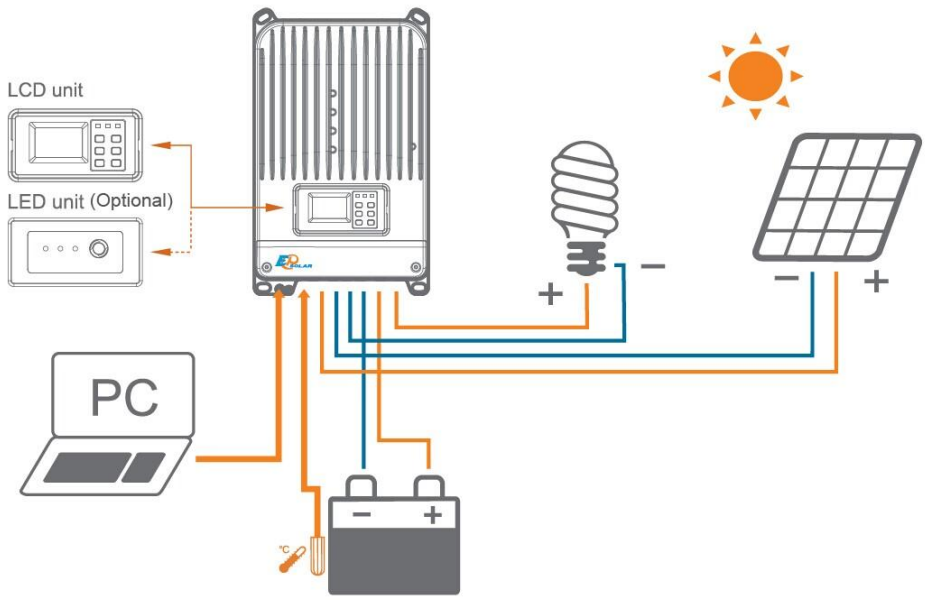
Features：

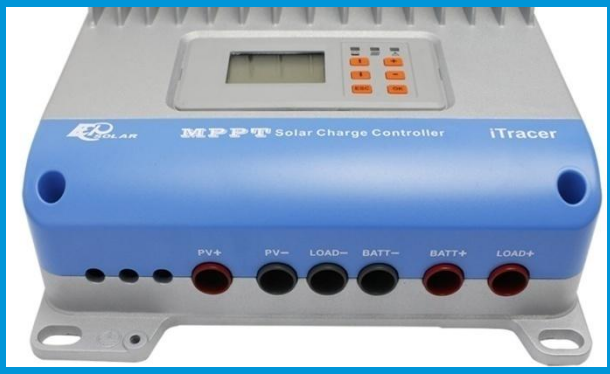
- Advanced MPPT algorithm with the max. tracking efficiency of 99%.
- Multi-phase synchronous rectification technology realizing peak conversion efficiency 98%
- Dual-core(ARM CPU+DSP) control architecture improves the system response speed and optimizes the performance of the system

- 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 protection
- Reverse current protection at night
- Battery reverse polarity protection
- Load short circuit protection
- PV overvoltage protection
- PV reverse polarity protection
- Over temperature protection
- Load overload protection



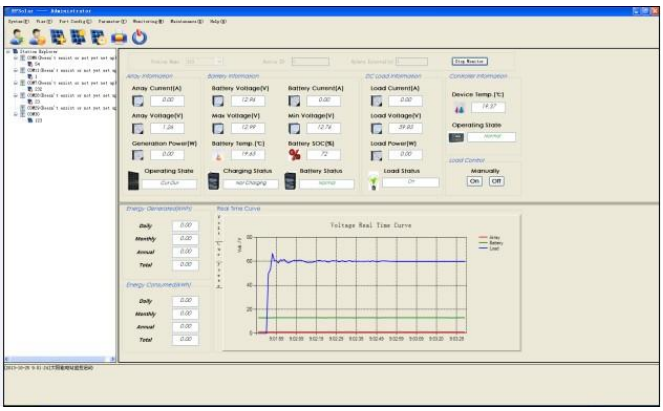


Accessories :

Remote temperature sensor
RTS300R10K5.08A

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

PC software：



Display interface：

Technical specifications

Model	IT3415ND	IT4415ND	IT6415ND
Nominal system voltage	12V/24V /36V/48V auto work		
Rated battery current	30A	45A	60A
Rated load current	30A	45A	60A
Max. PV open circuit voltage	150V		
Voltage range	8~72V		
Max. PV input power	400W (12V)	600W (12V)	800W (12V)
	800W (24V)	1200W (24V)	1600W (24V)
	1200W (36V)	1800W (36V)	2400W (36V)
	1600W (48V)	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		
Tracking efficiency	99%		
Peak conversion efficiency	98%		

*** Technical data for 12V system at 25℃**

Mechanical	IT3415ND	IT4415ND	IT6415ND
Overall	358x219x102mm	382x231x107mm	440x231x110mm
Mounting	339x195mm	362x205mm	420x205mm
Terminal	25mm^2	35mm^2	35mm^2
Net Weight	3.7kg	4.6kg	5.9kg

Environmental	
Ambient temp. range	-25℃～+55℃
Storage temp. range	-30℃～+85℃
Humidity range	95% N.C.
Enclosure	IP20

Conversion Efficiency Curves:

Illumination Intensity: 1000W/m^2 Temperature: 25℃
Test model: IT6415ND