



iTracer series

MPPT controller with load control

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.

FEATURES

- Advanced MPPT algorithm with the max. tracking efficiency up to 99.5%.
- Multi-phase synchronous rectification technology realizing peak conversion efficiency 98%
- Ultra-fast tracking speed and guaranteed tracking efficiency
- Accurately recognizing and tracking of multiple power points
- Four battery type options: Sealed, Gel, Flooded and USER
- 128*64 dot-matrix LCD intuitively displays data and state
- Energy statistics recording
- 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)
- Optional PC monitoring software and remote meter for real-time monitoring and battery management parameter setting
- Field upgradable firmware



ELECTRONIC PROTECTIONS

- PV short circuit protection
- PV over current protection
- PV reverse polarity protection
- Battery over voltage protection
- Battery over discharge protection
- Battery reverse polarity protection
- Load over load protection
- Load short circuit protection
- Controller overheating protection

Application



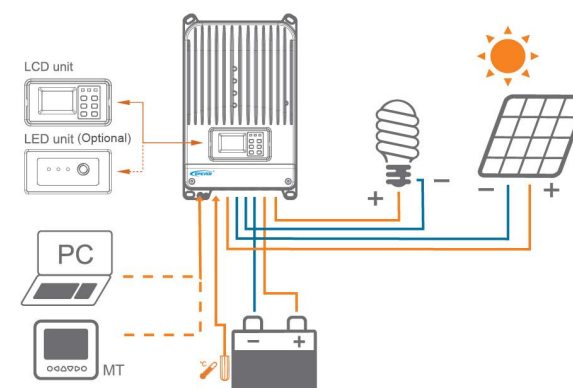
PRODUCT FAMILY



TECHNICAL SPECIFICATIONS

Model	IT3415ND	IT4415ND	IT6415ND
Nominal system voltage	12/24/36/48V auto work		
Rated charge current	30A	45A	60A
Rated discharge current	30A	45A	60A
Max. PV open circuit voltage	150V at minimum operating environment temperature, 138V at 25°C environment temperature		
MPP voltage range	$V_{bat} + 2V \sim 108V$		
Max. PV input power	12V 400W	12V 600W	12V 800W
	24V 800W	24V 1200W	24V 1600W
	36V 1200W	36V 1800W	36V 2400W
	48V 1600W	48V 2400W	48V 3200W
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		
Self-consumption	1.4~2.2W		
Temp. compensation	-3mV/°C/2V		
Communication	RS485/RS232(3.81-4P interface)		
Grounding	Common negative		
Dimension	358x219x102mm	382x231x107mm	440x231x110mm
Net weight	3.7kg	4.6kg	5.9kg
Enclosure	IP20		
Working temperature	-25°C ~ +55°C		
Humidity range	≤95% (N.C.)		

※Technical data for 12V system at 25°C, twice in 24V system, triple in 36V system and quadruple in 48V system.



All product specifications are subject to change without notice.