

## SOLAR CHARGER CONTROLLER



### MPPT iTracer-ND Series

45A - 60A

iTracer-ND is an intelligent, efficient, high-speed solar charge controller with advanced Maximum Power Point Tracking (MPPT) algorithm, which can harvest the maximum power from the solar array to charge battery. It can be applied in the off-grid PV systems up to 3KW, and increase the efficiency up to 30%.

The die-cast aluminum design ensure higher heat dissipation performance. Electronic protections prevent damage as operating error. RS485 Port/Modbus protocol improve extensive communication ability, and programmable parameter make the controllers working with different battery types.

#### Models:

- IT4415ND, 45A, 12/24/36/48V auto work
- IT6415ND, 60A, 12/24/36/48V auto work

#### Features:

- Advanced MPPT technology
- High tracking efficiency  $\geq 99.5\%$
- Ultra-fast tracking speed
- Real-time data monitoring and parameters setting with MT50, APP or PC software
- Support firmware upgrade
- Automatic Switch On-Off

#### Electronic protections:

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

### Technical specifications



MODEL	IT4415ND	IT6415ND
Nominal system voltage	12/24/36/48VDC auto work	
Rated charge current	45A	60A
Rated discharge current	45A	60A
Max. PV open circuit voltage	150V (at minimum operating environment temperature) 138V (at 25°C environment temperature)	
Battery input voltage range	8~68V	
Rated PV input power	600W (12V)	800W (12V)
	1200W (24V)	1600W (24V)
	1800W (36V)	2400W (36V)
	2400W (48V)	3200W (48V)
Equalize charging voltage*	Sealed: 14.6V, Flooded: 14.8V, User: 9~17V	
Boost charging voltage*	Gel: 14.2V, Sealed: 14.4V, Flooded: 14.6V, User: 9~17V	
Float charging voltage*	Gel /Sealed /Flooded: 13.8V, User: 9~17V	
Low voltage reconnect voltage*	Gel /Sealed /Flooded: 12.6V, User: 9~17V	
Low voltage disconnect voltage*	Gel /Sealed /Flooded: 11.1V, User: 9~17V	
Self-consumption	1.4~2.6W	
Temperature compensation coefficient	-3mV/°C/2V	
Grounding	Common negative	

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

\* Programmable voltage value by PC, MT50 and APP.

MECHANICAL	IT4415ND	IT6415ND
Overall dimension	382x231x107mm	440x231x110mm
Terminal	2AWG (35mm <sup>2</sup> )	2AWG (35mm <sup>2</sup> )
Net weight	4.6kg	5.9kg
Enclosure	IP20	

### ENVIRONMENTAL

LCD temperature range	-20°C~ +70°C
Working environment temperature	-25°C~ +45°C
Relative humidity	≤95% (N.C.)