

# MPPT Solar charge controller

## Tracer series

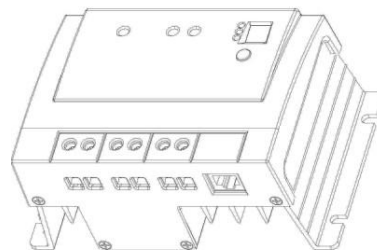


Tracer series controller adopts latest MPPT technology (Maximum Power Point Tracking) and advanced tracking algorithm to make the solar module operate at ideal voltage which the solar modules can produce the maximum available power.

Compared to conventional PWM controller, MPPT technology increases the charge efficiency up to 30% and potentially decrease the power of solar array needed. The ability to step-down the higher voltage solar module to recharge a lower voltage battery bank greatly increases system design flexibility. The cable size can be reduced because of the small current from the solar array.

### Features:

- ◆ MPPT technology
- ◆ Peak conversion efficiency of 97%
- ◆ High Tracking efficiency of 99%
- ◆ Several seconds tracking speed
- ◆ 4-Stage charge with PWM output
- ◆ Nature convection cooling
- ◆ Full power output up to 45 °C
- ◆ Temperature compensation
- ◆ Sealed, Gel and Flooded battery option
- ◆ Widely used, automatically recognize day/night
- ◆ Diversified load control
- ◆ RJ45 interface & optional meter



### Optional Accessories :

remote meter MT-5



### Electronic protection:

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

## Technical specifications

Electrical parameters	Tracer-1210RN	Tracer-2210RN	Tracer-3215RN	Tracer-4210RN
	Tracer-1215RN	Tracer-2215RN		
Nominal system voltage	12V/24V auto work			
Rated battery current	10A	20A	30A	40A
Rated load current	10A	20A	20A	20A
Maximum battery voltage	32V			
Max. solar input voltage	100VDC (Tracer-1210RN)	100VDC (Tracer-2210RN)	150VDC (Tracer-3215RN)	100VDC (Tracer-4210RN)
	150VDC (Tracer-1215RN)	150VDC (Tracer-2215RN)		
Max. PV input power	12V 130W	12V 260W	12V 390W	12V 500W
	24V 260W	24V 520W	24V 780W	24V 1000W
Self-consumption	≤10mA(24V)			
Communication	TTL232 / 8pin RJ45			
Temp. compensation	-5mV/°C/2V			

Mechanical parameters	Tracer-1210RN	Tracer-2210RN	Tracer-3215RN	Tracer-4210RN
	Tracer-1215RN	Tracer-2215RN		
Overall dimension	156x97x68mm	169x118x83mm	242x169x91mm	242x169x91mm
Mounting holes	147x60mm	160x80mm	180x160mm	180x160mm
Terminal	4mm <sup>2</sup>	10mm <sup>2</sup>	25mm <sup>2</sup>	25mm <sup>2</sup>
Net weight	0.55kg	0.95kg	2kg	2.05kg

Environmental parameters	
Working temperature	-35°C to +55°C
Storage temperature	-35°C to +80°C
Humidity	10%-90% NC
Enclosure	IP30



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