

# BLUESOLAR CHARGE CONTROLLERS MPPT 150/70



**Solar charge controller  
MPPT 150/70**

### Charge current up to 70 A and PV voltage up to 150 V

The BlueSolar 150/70-MPPT charge controller is able to charge a lower nominal-voltage battery from a higher nominal voltage PV array. The controller will automatically adjust to a 12, 24, 36, or 48 V nominal battery voltage.

### Ultra fast Maximum Power Point Tracking (MPPT)

Especially in case of a clouded sky, when light intensity is changing continuously, an ultra fast MPPT controller will improve energy harvest by up to 30% compared to PWM charge controllers and by up to 10% compared to slower MPPT controllers.

### Advanced Maximum Power Point Detection in case of partial shading conditions

If partial shading occurs, two or more maximum power points may be present on the power-voltage curve.

Conventional MPPT's tend to lock to a local MPP, which may not be the optimum MPP.

The innovative BlueSolar algorithm will always maximize energy harvest by locking to the optimum MPP.

### Outstanding conversion efficiency

No cooling fan. Maximum efficiency exceeds 98%. Full output current up to 40°C (104°F).

### Flexible charge algorithm

Several preprogrammed algorithms. One programmable algorithm.

Manual or automatic equalisation.

Battery temperature sensor. Battery voltage sense option.

### Programmable auxiliary relay

For alarm or generator start purposes

### Extensive electronic protection

Over-temperature protection and power derating when temperature is high.

PV short circuit and PV reverse polarity protection.

BlueSolar charge controller	MPPT 150/70
Nominal battery voltage	12 / 24 / 36 / 48V Auto Select
Rated charge current	70A @ 40°C (104°F)
Maximum solar array input power	12V: 1000W / 24V: 2000W / 36V: 3000W / 48V: 4000W
Maximum PV open circuit voltage	150V
Minimum PV voltage	Battery voltage plus 7 Volt to start      Battery voltage plus 2 Volt operating
Standby power consumption	12V: 0,55W / 24V: 0,75W / 36V: 0,90W / 48V: 1,00W
Efficiency at full load	12V: 95% / 24V: 96,5% / 36V: 97% / 48V: 97,5%
Absorption charge	14.4 / 28.8 / 43.2 / 57.6V
Float charge	13.7 / 27.4 / 41.1 / 54.8V
Equalization charge	15.0 / 30.0 / 45 / 60V
Remote battery temperature sensor	Yes
Default temperature compensation setting	-2,7mV/°C per 2V battery cell
Programmable relay	DPST    AC rating: 240VAC/4A    DC rating: 4A up to 35VDC, 1A up to 60VDC
CAN bus communication port	Two RJ45 connectors, NMEA2000 protocol
Operating temperature	-40°C to 60°C with output current derating above 40°C
Cooling	Natural Convection
Humidity (non condensing)	Max. 95%
Terminal size	35mm <sup>2</sup> / AWG2
Material & color	Aluminium, blue RAL 5012
Protection class	IP20
Weight	4,2 kg
Dimensions (h x w x d)	350 x 160 x 135 mm
Mounting	Vertical wall mount    Indoor only
Safety	EN60335-1
EMC	EN61000-6-1, EN61000-6-3