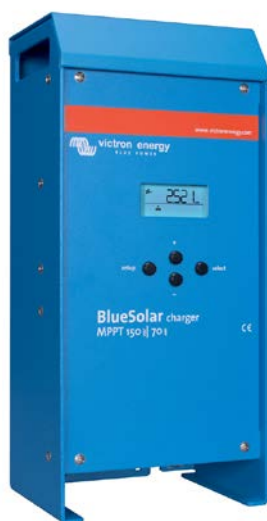


# BlueSolar Charge Controller MPPT 150/70 & 150/85

www.victronenergy.com



**Solar Charge Controllers  
MPPT 150/70 and 150/85**

### PV voltage up to 150 V

The BlueSolar MPPT 150/70 and 150/85 charge controllers will charge a lower nominal-voltage battery from a higher nominal voltage PV array.

The controller will automatically adjust to a 12, 24, 36, or 48V 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

Maximum efficiency exceeds 98%. Full output current up to 40°C (104°F).

### Flexible charge algorithm

Several preconfigured algorithms. One user 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.

Reverse current protection.

### CAN bus

To parallel up to 25 units, to connect to a ColorControl panel or to connect to a CAN bus network

BlueSolar Charge Controller	MPPT 150/70	MPPT 150/85
Nominal battery voltage	12 / 24 / 36 / 48V Auto Select	
Rated charge current	70A @ 40°C (104°F)	85A @ 40°C (104°F)
Maximum solar array input power 1)	12V: 1000W / 24V: 2000W / 36V: 3000W / 48V: 4000W	12V: 1200W / 24V: 2400W / 36V: 3600W / 48V: 4850W
Maximum PV open circuit voltage	150V absolute maximum coldest conditions 145V start-up and operating maximum	
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	-2,7 mV/°C per 2V battery cell	
Remote on/off	Yes	
Programmable relay	DPST AC rating: 240VAC / 4A DC rating: 4A up to 35VDC, 1A up to 60VDC	
Communication port	VE.Can: two paralleled RJ45 connectors, NMEA2000 protocol	
Parallel operation	Yes, through VE.Can. Max 25 units in parallel	
Operating temperature	-40°C to 60°C with output current derating above 40°C	
Cooling	Low noise fan assisted	
Humidity (non condensing)	Max. 95%	
Terminal size	35mm <sup>2</sup> / AWG2	
Material & color	Aluminium, blue RAL 5012	
Protection class	IP20	
Weight	4,2kg	
Dimensions (h x w x d)	350 x 160 x 135mm	
Mounting	Vertical wall mount Indoor only	
Safety	EN/IEC 62109-1	
EMC	EN 61000-6-1, EN 61000-6-3	

1) If more solar power is connected, the controller will limit input power to the stated maximum