

Skype



BLUESOLAR MPPT



Regulador Solar Blue Solar MPPT 150/70 MC4



Regulador Solar BlueSolar MPPT 75/15



Regulador Solar BlueSolar MPPT



Regulador BlueSolar MPPT 100/15



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.

Load output

Over-discharge of the battery can be prevented by connecting all loads to the load output. The load output will disconnect the load when the battery has been discharged to a preset voltage.

Alternatively, an intelligent battery management algorithm can be chosen: see BatteryLife.

The load output is short circuit proof.

Some loads (especially inverters) can best be connected directly to the battery, and the inverter remote control connected to the load output. A special interface cable may be needed, please see the manual for compatible products.

BatteryLife: intelligent battery management

When a solar charge controller is not able to recharge the battery to its full capacity within one day, the result is often that the battery will be continually be cycled between a "partially charged" state and the "end of discharge" state. This mode of operation (no regular full recharge) will destroy a leadacid battery within weeks or months.

The BatteryLife algorithm will monitor the state of charge of the battery and, if needed, day by day slightly increase the load disconnect level (i. e. disconnect the load earlier) until the harvested solar energy is sufficient to recharge the battery to nearly the full 100%. From that point onwards the load disconnect level will be modulated so that a nearly 100% recharge is achieved about once every week.

Automatic battery voltage recognition

The MPPT 75/15 will automatically adjust to your system voltage.

75/10 - 100/20 SPECIFICATIONS

	MPPT 75/10	MPPT 75/15	MPPT 100/15	MPPT 100/20	MPPT 100/20-48
Performance					
Battery voltage	12 / 24 Vdc	12 / 24 Vdc	12 / 24 Vdc	12 / 24 Vdc	12 / 24 / 48 Vdc
Self consumption	12V: 25 mA - 24 V: 15 mA			12V: 25 mA - 24 V: 15 mA 48V: 10 mA	
DC input					
Maximum power 12V	PV 145 W	220 W	220 W	290 W	290 W

Maximum PV power 24V	290 W	440 W	440 W	580 W	580 W
Maximum PV power 48V	n.d.	n.d.	n.d.	n.d.	1160 W
Max PV open circuit voltage	75 Vdc	75 Vdc	100 Vdc	100 Vdc	100 Vdc
Peak efficiency	98 %	98 %	98 %	98 %	98 %
DC Output					
Load current	15 Amp max	15 Amp max	15 Amp max	20 Amp max.	20 A / 20 A / 1 A max.
Absorption voltage	14,4 / 28,8 Vdc	14,4 / 28,8 Vdc	14,4 / 28,8 Vdc	14,4 / 28,8 Vdc	14,4 / 28,8 / 57,6 Vdc
Float voltage	13,8 / 27,6 Vdc	13,8 / 27,6 Vdc	13,8 / 27,6 Vdc	13,8 / 27,6 Vdc	13,8 / 27,6 / 55,2 Vdc
Charge algorithm	Multi stage adaptative				
Temperature compensation	-16 mV/°C rep. -32mV/°C				
Continuous peak load current	13 A	15 A	15 A	20 A	20 A
Low voltage load disconnect	11,1 / 22,2 / 44,4 V ó 11,8 / 23,6 / 57,6 V or BatteryLife algorithm				
Low voltage load reconnect	13,1 V / 26,2 / 52,4 V ó 14 V / 28 / 56 V or BatteryLife algorithm				
Ambiental specifications					
Operating temperature	-30 a +60 °C. Full rated output up to 40° C				
Humidity	95%, non condensing				
Enclosure and Environmental					
Data communication port	VE.Direct				
Power terminals	6 mm2	6 mm2	6 mm2	6 mm2	6 mm2
Protection category	IP65 / IP22 (conections)				
Dimensions	100 x 113 x 40 mm		100 x 113 x 50 mm	100 x 113 x 60 mm	
Weight	0,5 Kg		0,6 Kg	0,65 Kg	
Mounting	Vertical wall mount. Indoor only				
Standards					
Security	EN 62109-1, UL 1741, CSA C22.2				

100/30 - 100/50 SPECIFICATIONS

MPPT 100/30 MPPT 100/50

	150/35	150/50
Performance		
Battery voltage	12 / 24 Vdc	12 / 24 Vdc
Self consumption	12V: 30 mA. - 24V: 20 mA.	
DC input		
Maximum PV power 12V	440 W (15 to 80 Vdc)*	700 W (15 to 70 Vdc resp. 95V)*
Maximum PV power 24V	880 W (30 to 80 Vdc)*	1400 W (30 to 70 Vdc resp. 95V)*
Max PV open circuit voltage	100 Vdc	100 Vdc
Peak efficiency	98 %	98 %
DC Output		
Absorption voltage	14,4 / 28,8 Vdc	14,4 / 28,8 Vdc
Float voltage	13,8 / 27,6 Vdc	13,8 / 27,6 Vdc
Charge algorithm	Multi stage adaptative	
Temperature compensation	-16 mV/°C rep. - 32mV/°C	
Load current	30 A	50 A
Ambiental specifications		
Operating temperature	-30 a +60 °C. Full rated output up to 40° C	
Humidity	95%, non condensing	
Enclosure and Environmental		
Data communication port	VE.Direct	
Terminals	13 mm ²	13 mm ²
Protection category	IP43 / IP22 (conections)	
Dimensions	130 x 186 x 70 mm	
Weight	1,30 Kgr	
Mounting	Vertical wall mount. Indoor only	
Standards		
Security	EN62109	

150/35 - 150/100 SPECIFICATIONS

	MPPT 150/35	MPPT 150/45	MPPT 150/60	MPPT 150/70	MPPT 150/100 VE.Can
Performance					
Battery voltage	12 / 24 / 48 Vdc	12/24/48 Vdc	12/24/48 Vdc	12/24/48 Vdc	12/24/48 Vdc
Self consumption	12V: 25mA - 24V: 15		10 mA	30 mA	

47V: 10
mA -
48V: 10
mA

DC input

Maximum PV power 12V	500 W	650 W	860 W	1000 W	1450 W
Maximum PV power 24V	1000 W	1300 W	1720 W	2000 W	4350 W
Maximum PV power 48V	2000 W	2600 W	3440 W	4000 W	5800 W
Max PV open circuit voltage	150 Vdc	150 Vdc	150 Vdc	150 Vdc	150 Vdc
Peak efficiency	98 %	98 %	98 %	98 %	98 %

DC Output

Absorption voltage	14,4 / 28,8 / 57,6 Vcc (adjustable)				
Float voltage	13,8 / 27,6 / 55,2 Vcc (adjustable)				
Charge algorithm	Multi stage adaptative				
Temperature compensation	-16 mV/°C / -32mV/°C / -64 mV/°C				
Load current	35 A	45 A	60 A	70 A	100 A
Max. PV short circuit current	40 A	50 A	50 A	50 A	70 A
Protection	PV Reverse polarity / Output Short Circuit/ Over temperature				

Ambiental specifications

Operating temperature	-30 to +60 °C. Full rated output up to 40° C
Humidity	95%, non condensing

Enclosure and Environmental


Data communication port	VE.Direct		VE.Can		
Terminals	13 mm2	35 mm2 (Tr) 2 x MC4 (MC4)	35 mm2 (Tr) 2 x MC4 (MC4)	35 mm2 (Tr) 2 x MC4 (MC4)	35 mm2 (Tr) 3 x MC4 (MC4)
Protection category	IP43 / IP22 (conections)				
Dimensions	130 x 186 x 70 mm	Tr: 185 x 250 x 95 mm MC4: 215 x 250 x 95 mm		216 x 295 x 103 mm	
Weight	1,25 Kgr	3 Kgr		3 Kgr	
Mounting	Vertical wall mount. Indoor only				

Standards

Security	EN 62109-1, UL 1741, CSA C22.2
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