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BLUESOLAR MPPT

Regulador Solar Blue Solar MPPT 150/70 MC4

Regulador Solar BlueSolar MPPT 150/70 de Victron Energy

Regulador Solar BlueSolar MPPT 75/15

Regulador Solar BlueSolar MPPT

Regulador Solar BlueSolar MPPT 150/70

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 TO 100/15 SPEDIFICATIONS

	MPPT 75/10	MPPT 75/15	MPPT 100/15
Performance			
Battery voltage	12 / 24 Vdc	12 / 24 Vdc	12 / 24 Vdc
Self consumption	10 mA	10 mA	10 mA
DC input			
Maximum PV power 12V	145 W (15 to 70 Vdc)*	220 W (15 to 70 Vdc)*	220 W (15 to 100 Vdc)*
Maximum PV power 24V	290 W (30 to 70	440 W (30 to 70	440 W (30 to 100

	70 Vdc)*	70 Vdc)*	100 Vdc)*
Max PV open circuit voltage	75 Vcc	75 Vcc	100 Vcc
Peak efficiency	98 %	98 %	98 %
DC Output			
Load current	15 Amp max	15 Amp max	15 Amp max
Absorption voltage	14,4 / 28,8 Vdc	14,4 / 28,8 Vdc	14,4 / 28,8 Vdc
Float voltage	13,8 / 27,6 Vdc	13,8 / 27,6 Vdc	13,8 / 27,6 Vdc
Charge algorithm	Multi stage adaptative		
Temperature compensation	-16 mV/°C rep. -32mV/°C		
Continuos peak load current	10 A	15 A	15 A
Low voltage load disconnect	11,1 / 22,2 V ó 11,8 / 23,6 V or BatteryLife algorithm		
Low voltage load reconnect	13,1 V / 26,2 V ó 14 V / 28 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
Protection category	IP65 / IP22 (conections)		
Dimensions	100 x 113 x 40 mm		
Weight	0,5 Kgr		
Mounting	Vertical wall mount. Indoor only		
Standards			
Security	EN62109		

100/30 - 100/50

	MPPT 100/30	MPPT 100/50
Performance		
Battery voltage	12 / 24 Vdc	12 / 24 Vdc
Self consumption	10 mA	1 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 mm2	13 mm2
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 TO 150/100

	MPPT 150/35	MPPT 150/45	MPPT 150/60	MPPT 150/70	MPPT 150/85	MPPT 150/100
Performance						
Battery voltage	12/24/48 Vdc	12/24/48 Vdc	12/24/48 Vdc	12/24/48 Vdc	12/24/48 Vdc	12/24/48 Vdc
Self consumption	10 mA	10 mA	10 mA	10 mA	10 mA	10 mA
DC input						
Maximum PV power 12V	500 W	650 W	860 W	1000 W	1200 W	1450 W
Maximum PV power 24V	1000 W	1300 W	1720 W	2000 W	2400 W	2900 W
Max PV open circuit voltage	2000 W	2600 W	3440 W	4000 W	4900 W	5800 W
Max PV open circuit voltage	150 Vdc	150 Vdc	150 Vdc	150 Vdc	150 Vdc	150 Vdc
Peak	98 %	98 %	98 %	98 %	98 %	98 %

efficiency						
DC Output						
Absorption voltage	14,4 / 28,8 / 57,6 Vcc					
Float voltage	13,8 / 27,6 / 55,2 Vcc					
Charge algorithm	Multi stage adaptative					
Temperature compensation	-16 mV/°C rep. -32mV/°C					
Load current	35 A	45 A	60 A	70 A	85 A	100 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 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)	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			Tr: 216 x 295 x 103 mm MC4: 246 x 295 x 103 mm	
Weight	1,25 Kgr	3 Kgr			4,5 Kgr	
Mounting	Vertical wall mount. Indoor only					
Standards						
Security	EN62109					

150 /70 - 150/85 VE.CAN

	MPPT 150/70	MPPT 150/85
Performance		
Battery voltage	12 / 24 / 36 / 48 Vdc	
Self consumption	12V: 0,55W / 24V: 0,75W / 36V: 0,90W / 48V: 1,00W	
DC input		
Maximum PV power 12V	1000 W	1200 W
Maximum PV power 24V	2000 W	2400 W
Maximum PV power 36V	3000 W	3600 W
Maximum PV power 48V	4000 W	4850 W
Max PV open circuit voltage	150 Vdc	150 Vdc
Peak efficiency	12V: 95% / 24V: 96,5% /	

	36V: 97% / 48V: 97,5%	
DC Output		
Absorption voltage	14.4 / 28.8 / 43.2 / 57.6V	
Float voltage	13.7 / 27.4 / 41.1 / 54.8V	
Equlization voltage	15.0 / 30.0 / 45 / 60V	
Temperature compensation	-2,7 mV/°C por cada elemento 2V	
Load current	70 A	85 A
Ambiental specifications		
Operating temperature	-40 a +60 °C. Full rated output up to 40° C	
Humidity	95%, non condensing	
Enclosure and Environmental		
Data communication port	VE.Can: 2 paralleled RJ45 connectors, NMEA 2000. Max. 25 units in parallel.	
Terminals	35 mm2	35 mm2
Protection category	IP20	
Dimensions	350 x 160 x 135 mm	
Weight	4,2 Kgr	
Mounting	Vertical wall mount. Indoor only	
Standards		
Security	EN60335-1	
EMC	EN61000-6-1, EN61000-6-3	

DOWNLOADS

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