WRM15 dualB WRM15 dualB-E

DUAL BATTERY 15A MPPT CHARGE CONTROLLER



Il **WRM15** dualB è un regolatore MPPT da modulo fotovoltaico, per la carica di due batterie, una primaria e quindi prioritaria e l'altra secondaria. Il regolatore è controllato attraverso una applicazione Android o iOS che si collega al regolatore attraverso una connessione Bluetooth.

La versione **WRM15 dualB** è inoltre dotato di una porta USB che può essere usata per caricare la batteria di uno smartphone, tablet o power bank e controlla un'uscita carico che può essere comandata in automatico dal regolatore secondo i vari programmi impostabili dall'App.

La versione **WRM15 dualB-E** non ha l'uscita carico e la presa USB.



MPPT technology with buck-boost circuit



Max module power:

- 250 W for 12 V battery
- 500 W for 24 V battery



18 programs to manage the load (available only on WRM15 dualB version)



12 V / 24 V battery auto-detect voltage



Bluetooth remote control application



Temperature-compensated charge voltage



USB port to charge mobile devices (available only on WRM15 dualB version)



Internal blocking diode



Protections:

- Low battery load-disconnect*
- Over-temperature
- Battery polarity inversion
- Output overload protection*

 * available only on WRM15 dualB version
- Pb Li

Pb-lead acid, Pb-AGM, Pb-gel batteries and Lithium batteries



IP20 metal box

WRM15 dualB is a MPPT charge controller for PV applications with automatic charge management of two batteries, one primary and one secondary. The device uses the Bluetooth interface to connect with Android and iOS mobile devices by the dedicated APP.

The **WRM15** dualB version has USB port for smartphone, tablet or battery bank charging and has the load output active automatically by settable internal programs.

The **WRM15 dualB-E** version does not have the load out and the USB port.



Electrical Features

WRM 15 dualB / WRM 15 dualB-E

		Nominal battery volt		age 12V	Nominal battery voltage		e 24V
		Min	Тур	Max	Min	Тур	Max
Battery voltage	Vbatt	10V		17V	20V		34V
Open circuit module voltage	Vpan	20V	-	100V	40V	-	100V
Module voltage	ipan	-	-	15A	-	-	15A
Maximum module power	Pmax	-	-	250W	-	-	500W
Load output voltage*	Vload	-	Battery voltage	-	-	Battery voltage	-
Load voltage*	Iload	-	-	15A	-	-	15A
Charging voltage at 25 ° C SEAL program (default)	Vch		14.4V			28.8V	
Charging voltage at 25 ° C program FLOOD	Vch		14.8V			29.6V	
Charging voltage at 25 ° C program LEO	Vch		14.4V			28.8V	
Charging voltage for Li program	Vch	14.0V	-	14.7V	28.0V	-	29.4V
Vch as function of battery temperature (Tbatt)	Vtadj	-	-24mV / ° C	-	-	-48mV / ° C	-
Low battery voltage (adjustable)*	VIb	10.8V	11.4V (default)	12.2V	21.6V	22.8V (default)	24.4V
Low battery output voltage*	Vout_lb	12.4V	13.8V	13.8V	24.8V	27.6V	27.6V
Day detection voltage (adjustable)*	Vday	2.4V	4.8V (default)	9.6V	4.8V	9.6V (default)	19.2V
Night detection voltage Vnight=Vday-0.8V (adjustable)*	Vnight	1.6V	-	8.8V	4.0V	-	18.4V
Voltage for Float phase (Adjustable)	VFIt at 25 ° C	13.2V	13.4V (default)	14.4V	26.4V	26.8V (default)	28.8V
Phase Absorption Time (Adjustable)	TAbsorption	1.0 h	3.0 h (default)	4.0 h	1.0 h	3.0 h (default)	4.0 h
Self-consumption	isleep		12.7mA (Vbat 14,0V)			17,7mA (Vbat 28,0V)	
Working temperature:	Tamb	-10°C		50 ° C	-10°C		50 ° C
Dissipated power	Pdiss			20 W			29 W
Section to terminals		1mm ²		10mm ²	1mm ²		10mm ²
Protection degree			IP20			IP20	
Weight		-	515 g	-	-	515 g	-

^{*}available only on WRM15 dualB version

Installation scheme











