

WRM15 DualB

MPPT Dual Battery PV charge controller with Bluetooth control and USB output



General Description:

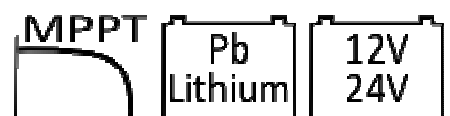
WRM15-Duo is an MPPT charge controller for PV application with automatic charge management of two batteries, one primary and one secondary, with Bluetooth connection for control with dedicated APP for Android and iOS mobile device.

The USB port output can be used for direct smartphone, tablet and battery bank charge.

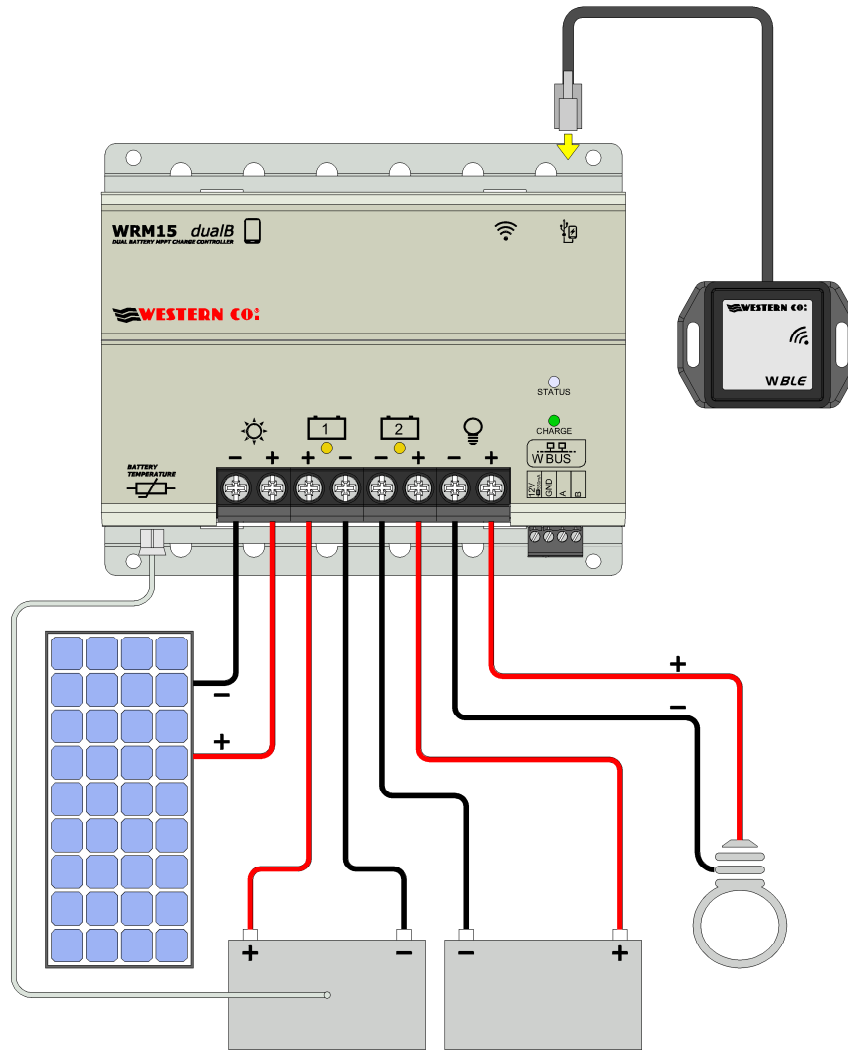
Typical applications:



- **15A PV charge controller**
- **Fast MPPT Maximum Power Point Tracker**
- **Dual battery with priority management (primary and secondary)**
- **12V / 24V battery voltage auto detection**
- **For sealed / GEL , flooded lead acid batteries and lithium-ion batteries**
- **Wide voltage range on PV module input VPAN Max 100V**
- **Bluetooth remote control with dedicated Android/iOS applications**
- **RS485 interface for remote LCD control WBUS (Western Co protocol)**
- **USB port for smartphone tablet and battery bank charge**
- **Temperature compensated charge voltage**
- **18 programs for load management**
- **Battery reverse polarity protection**
- **Low battery protection**
- **Over-temperature protection**
- **Output Overload protection**
- **IP20 metal box**



Installation Scheme:



Electrical features

		Nominal battery voltage 12V			Nominal battery voltage 24V		
		Min	Typ	Max	Min	Typ	Max
Battery voltage	Vbatt	10V	17V	20V	34V	100V	
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)	Vlb	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
Detection voltage during the day (adjustable)	Vday	2.4V	4.8V (default)	9.6V	4.8V	9.6V (default)	19.2V
Detection voltage: VNIGHT Vday = -0.8V	Vnight	1.6V	-	8.8V	4.0V	-	18.4V
Voltage for Float phase (Adjustable)	VFlt 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	-