

FEATURES & APPLICATIONS

- ❖ Provides a 12V DC power to the PVWDM Display from a 12V to 72V DC battery, wind/ solar system.
- ❖ Contains two 40 Amp shunts for measuring the Photo voltaic and Wind charge currents.
- ❖ Connects to PVWDM Display via RJ-45 jack network cable

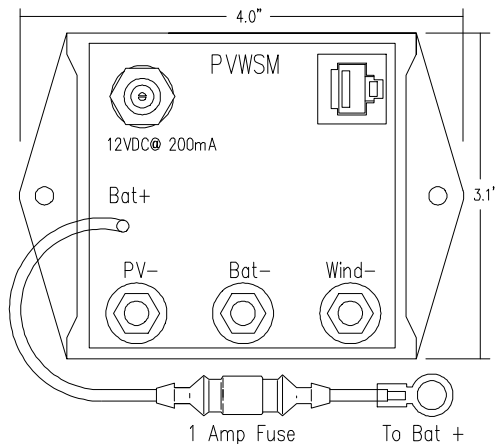
DESCRIPTION

The PVWSM shunt module serves as a switching power supply and shunt module for the PVWDM display unit. This Shunt module contains an internal switching power supply to power the PVWDM from 12-72V systems, RJ-45 network jack and provides two 40 Amp shunts (internal) to monitor the Photo voltaic Charge current and charge current from a Wind Generator. A standard computer network patch is used to connect the and PVWSM together via the RJ-45 jack on the back of the PVWDM. If the wrong configuration network cable such as the crossover type is used then the "error" LED on the back of the PVWDM will light indicating that the proper cable needs to be plugged in for the display to work properly.

OPERATION

The PVWSM monitors the battery voltage and adjusts the switching power supply to maintain a 12V DC output to power the display module. The PVWSM also contains the 40 amp current shunts for the Photo Voltaic charge current and for the wind charge current. It looks at the voltage drop across the shunts and scales it to a 0 to 2V DC signal. The 12VDC power and shunt signals are fed to the PVDM through the RJ-45 Jack and network patch cable.

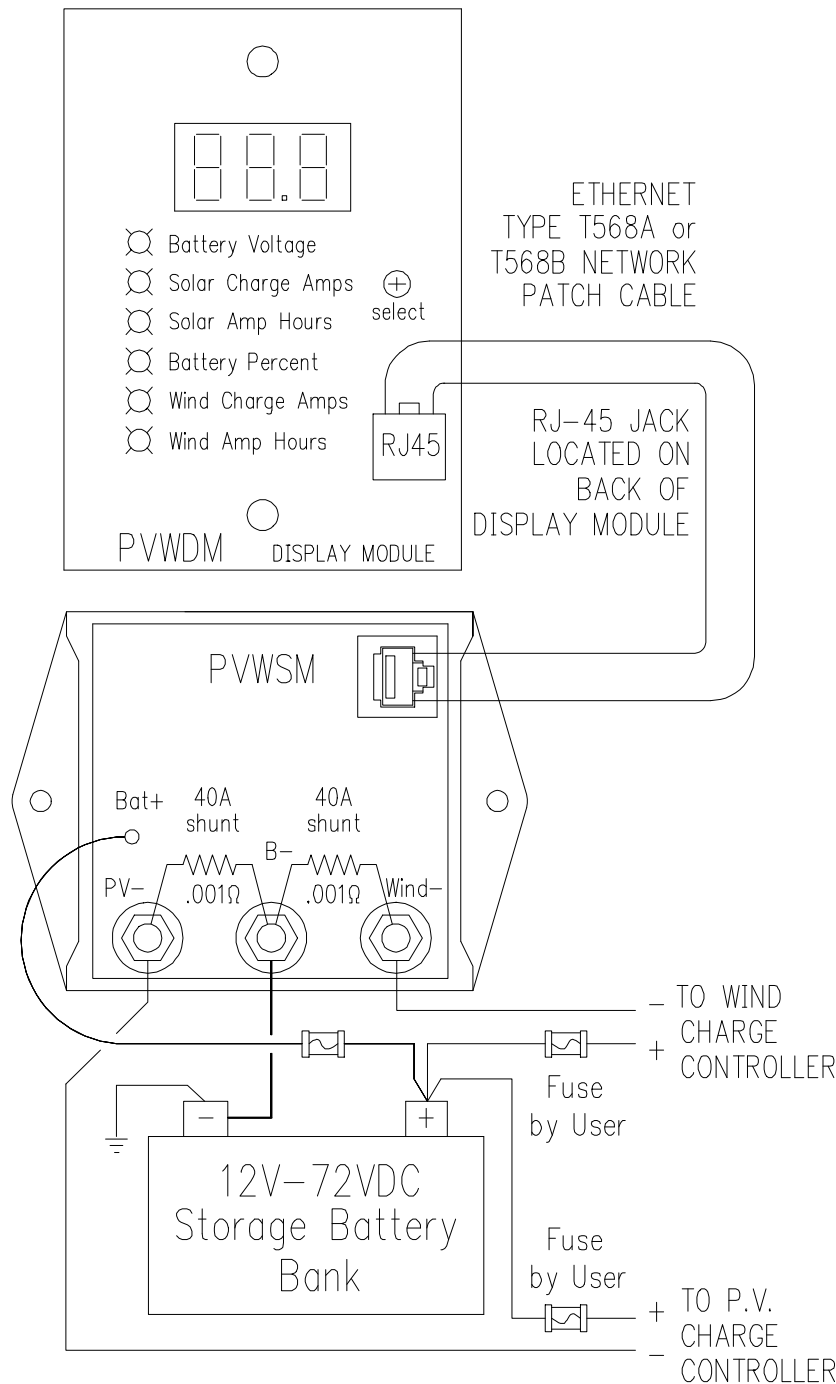
PHYSICAL CONFIGURATION



SPECIFICATIONS

SIZE/WEIGHT:	3.1"W x 4.0"L x .75"H, 8 ounces
MOUNTING:	Two - #8 x 0.75" screws
TERMINATIONS:	Three 1/4 x 20 bolts: Battery Negative post Photo Voltaic Negative wire Wind Gen. Negative wire, and One 3/8" ring connector: Battery Positive Post
PVWDM CONNECTION:	RJ-45 jack to T568A or T568B network patch cable
INTERNAL SHUNTS:	.001 ohms 40A @ 40mV Solar .001 ohms 40A @ 40mV Wind
POWER REQUIREMENTS	12 to 72VDC from Battery Bank or 12V DC @ 200mA (wall adapter)
TEMPERATURE:	0 to 50° C

SOLAR/WIND WIRING CONFIGURATION



The PVWSM monitors the battery voltage and adjusts the switching power supply to maintain a 12V DC output to power the display module. The PVWSM also contains the 40 amp current shunts to measure the Photo Voltaic charge current and wind charge current in the negative leg. It looks at the voltage drop across the shunts and scales it to a 0 to 2V DC signal. The 12VDC power and shunt signals are fed to the PVWDM through the RJ-45 Jack and network patch cable.