

Plasmatronics PL Interfaces

PLS

Shunt Adapter for PL Regulators

The Plasmatronics PL regulators are able to log all incoming and outgoing currents to and from your battery bank. If you have large DC loads or inverters you will need a PLS shunt interface and an external shunt in order for the regulator to monitor them. The shunt interface and shunt is also recommended if you sometimes charge your battery with a generator.

Loads & Battery Gauge

The PLS is a shunt adapter that interfaces with the PL regulator so that the regulator can monitor everything going in and out of the battery bank and give you a complete picture of your power system including amp-hours drawn out of the battery bank each day and the state of charge of the battery bank. You don't have to do any calculations to figure out how much power you have used and how full your batteries are – you just consult the regulator.

Without the PLS the PL20 can only monitor 20 amps of DC load from the load terminal and the PL40 and PL60 can only monitor 7 amps and 30 amps respectively. This means that if you have DC loads or inverter loads that draw more than this on the DC side you cannot connect them to the load terminal and the regulator isn't able to monitor them unless they are measured by an appropriate shunt connected to the shunt interface.

The shunts are available in 100 amp and 200 amp versions, depending on how large a load you have. You can connect two shunts to one shunt interface or have two shunt interfaces each monitoring separate shunts. You can have one shunt dedicated to an inverter and another shunt monitoring another incoming source such as a battery charger powered by a generator. Contact the staff at Rainbow Power Company

PLI

RS232 Computer Interface

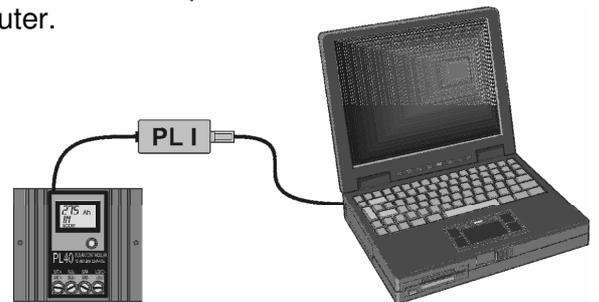
The PLI is a device to allow the PL series solar controllers to communicate with a computer. The PLI can be connected to a computer with a standard IBM serial cable and using a DOS or a Win 95/98/NT program to communicate with the PL controller. You can also connect a modem to the PLI.

Description

The PLI is an RS232 interface for PL series regulators. It allows data communication between a computer and the regulator (via a modem if necessary).

To prevent problems due to ground potential differences, the PLI uses optical coupling. This means that there is no electrical connection between the computer side and the PL side.

The energy to operate the PL side is drawn from the battery bank connection of the PL controller. The energy required to operate the computer side is drawn from the computer serial port connection. A small amount of power will be drawn from the computer.



SPECIFICATIONS of PL Interface

Line Speeds:	300, 1200, 2400, 9600 Baud
RS232 Input Levels required:	>+/- 5V
RS232 Drive levels:	>+/- 5V
Min Load Impedance:	3K
Output impedance TX:	300 ohm
DC Isolation:	500V
Temperature range:	-20°C to +70°C
Supply Current:	10mA (from PL supply) 1.5mA on RS232 side
Supply voltage:	10V to 100V



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