

6 STAGE 120A SOLAR CHARGE REGULATOR

PVLink



The Benbro PVLink PCU is a 6 array stage commercial solar charge regulator which is suitable for 12V, 24V and 48V systems.

The PCU is both a stand-alone regulator in its own right or can form part of an extensive hybrid system that includes a monitor/interrogation/comms unit, capable of controlling up to 6 PCUs and interfaces with other modules including load distribution units, Genset control units and 3 phase ac interface units.

The PCU provides a temperature compensated multi-mode charge regime and is complete with Low Voltage load disconnect capability and multiple alarm output contacts.

The display provides visual indication of the system status including system Voltage, current, temperature, AH logging and alarm status.

The regulator is housed in a rugged 19" 2RU rack mounting enclosure. All connections to the unit are pluggable for ease of installation and maintenance. The array inputs to the unit are fitted with circuit breakers and the unit is fitted with a 70 amp load circuit breaker. The system Voltage is user configurable and is suitable for positive or negative earth systems.

The Battery Voltage is measured using separate sense cables with reverse polarity protection and all inputs are fitted with transient protection.

The unit is equipped to automatically control a standby generator and rectifiers and provides connectivity for RS232 interface.

Up to 6 PCUs can be monitored and controlled by the PVLink interrogation Unit.

SPECIFICATIONS

Nominal System Voltage (Link Select)	12, 24, 36 & 48Volts Positive or Negative earth
Earthing	Suitable for Positive or Negative Earth – Auto selected
Maximum Array Current (6 stages)	120 Amps @ 12, 24, 36V, 90 Amps @ 48V C/B protected
Max Load Current (Via LVD contactor)	70 Amps DC circuit breaker protected
Form of Regulation	Boost, Equalise & Float charge modes
Battery Regulation set points	User definable – Recorded in E ² PROM
Ambient Temperature and Humidity Range	-5°C to 55°C Temperature 0-100% Relative Humidity
Alarms	Low Voltage
(All alarm set points are user definable)	High Voltage
LED indication and Voltage free contacts	Load Disconnect
Indication	System Status (off, normal, alarm) Solar array stage status (on/off) Alarms (LV, HV, LD) Generator (start, run) Rectifier (on) Charge mode (boost, equalise, float)
Battery Temp sensor (external)	Minus 4mV per °C per Cell
Four Terminal Voltage Sense	Included as standard using separate battery sense cables
Metering	Battery and Solar Voltage
	Solar, Battery, Load & Rectifier Current
	Solar radiation
	Battery Temperature
	Spare analogue input
Digital inputs	Gen run, Alarm reset, LVD Disable + 3 spares
Generator rectifier control	Genset, rectifier control and rectifier current metering
Quiescent current consumption	65mA @ 48VDC
Power Connections	Power Pole
Dimensions and Weight	19" 2RU 434mm(W) x 88mm(H) x 290mm(L) 6.5kg