

Model PC180

60 AMP PV CHARGE CONTROLLER



Fully Integrated Solutions for Solar Power Systems



The Connect PC Series uses the latest micro-controller technology to provide state-of-the-art system control for remote power systems.

The PC series combine, intelligent charge control with unparalleled flexibility. All charge control, load control, over current protection, are provided in a rugged, compact, NEMA 4X weatherproof fiberglass enclosure.

The Connect PC series is designed primarily for systems that have DC only loads, or small DC to AC inverters. The weatherproof enclosure allows installations in full exposure to all weather elements. The sealed contactors and optional conformal coating on the control board allows the unit to operate trouble free for years in high humidity and harsh environments.

Standard Features

Microprocessor Control - Advanced microprocessor based control system using series type, variable low frequency switching. Multi stage charging, automatic nighttime array disconnect, field adjustable charge termination set-points, status indicator LED's, and plug-in wire harness for easy servicing in the field.

Factory Calibrated Set-points - Each PSC series controller is calibrated to standard industry settings, and can be set at the factor to meet specific customer requirements.

Adjustable Controls - All controls and alarms have field-adjustable set points to allow precise operation with a wide range of system components.

Surge and Spike Suppression - Transient voltage suppression is included on all control boards for protection against voltage spikes and surges. The optional PLA100 Silicon Oxide arrester should be used for higher levels of lightning protection.

Enclosure - Weather proof, corrosion resistant, NEMA 4X fiberglass enclosure with stainless steel hinge and latches.

Controller Capacity - The capacity of the PC180 series controller is 180Amps (120Amps PV plus 60Amps load or 180Amps PV).

DC Load Breakers - (1) 60Amp industrial-grade circuit breaker with #2 wire terminals and red trip indicator standard. Positions are available for up to 6 DC input/load breakers in the PC180 series.

Large Wire Terminals - Heavy-duty, industrial grade, large set screw wire terminal lugs. #2/0 AWG for battery cable, 2 AWG for PV inputs and DC loads, #1/0 AWG for main ground.

Battery Monitor - 3 LED's display battery state of charge Green - Good, Yellow - OK, Red - Low

Optional Features

Additional PV Capacity (A60ADD) - Add additional 60Amp controller for up to 120Amps maximum of PV control available in the PC180. Additional controls allow multi-stage charge capacity.

Low Voltage Disconnect (LVD) - Automatic disconnection of 60Amps of DC load upon low battery condition. Include field adjustable disconnect and reconnect set point.

Hi-Low Alarms \ Generator Start (SIG) - A dry-contact alarm relay for both high and low battery conditions, with red and yellow indicator lights. Automatic generator start and stop signal for two-wire start type generators. Includes status LED, and field adjustable set points.

Conformal Coating - The standard control board is conformal coated for added protection against humidity and other extreme conditions

Digital System Monitor (PSM) - Digital LCD display of all system parameters including: battery voltage, charging current, and load current.

Temperature Compensation (BTC25) - Automatic battery temperature compensation to adjust PV control set point for high or low temperature conditions.

Lightning Protection (PLA100) - High-current lightning protection of 50,000Amps, 750 joules is available in addition to the standard protection on the circuit boards.

Stainless Steel Hardware (SSH) - Optional stainless steel hardware to increase corrosion resistance in extreme environments.

STANDARD FEATURES

- Multi-Stage 60 Amp Charge Controller
- Factory Calibrated Set-Points for 3 battery types
- Field Adjustable Set Points - Bulk, Absorb, & Float
- LED Battery & Charge Monitor
- Industrial Grade PV Input & DC Load Breakers
- Surge & Spike Suppression
- Large Wire Terminals
- UL Listed
- 5 Year Warranty

Typical Applications Include:

- Telecommunications
- Remote Telemetry
- Water Pumping Systems
- Village Electrification
- Rural Medical Facilities
- Cabins, Vacation Homes & Small Residences