

**TYPE: PS-CNTRL-V4 PowerShift® Controller**  
**Product Series: V4**



## 1. Key Features

- Integration of bypass feature into boost module.
- Integrate the auto line resistance mode (RS485 voltage feedback) and manual resistance mode into one controller, allowing the user to select mode on a per circuit basis.
- Expand the voltage setpoint VSP range to 54V to 58V, with 0.5 increments (Default - 54V)
- Auto Line Resistance (ALR) measurements within  $\pm 0.05\Omega$  of actual cable resistance, regardless of radio installed.
- Highly desirable to have LCD able to configure as many features as possible, including:
  - Select auto vs manual mode
  - Select VSP setpoint -54VDC to -58VDC, in increments of 0.5VDC, configuration at circuit level
  - Select OVP assignment for auto mode
  - Select cable gauge and length for manual mode
  - User-friendly method to disable individual output circuits; retain the existing V2 ability to disable/enable output circuits from LCD (doesn't require laptop & web page)
  - Reset Feature, Capability to reset an individual circuit to factory default via controller or GUI

User interface (LCD, web page) shows the following information:

- Input voltage to system, Individual circuit inputs are already provided
- Total module current draw, represents the sum of the input currents to each of the three circuits in a module
- Voltage at OVP per circuit
- Output Voltage per circuit
- Output Current per circuit
- Identify feedback or non-feedback mode per circuit, show in controller display, by the side of each circuit identification; if circuit is in Auto = Feedback will show the letter **Auto** in capital; if the circuit is in Manual = non-Feedback, will show the letter **MANUAL** in capital
- Active alarms
- Configuration settings, shows status of items on web pages (WP) and front panel FP but detailed configuration only through WP.

Following information available via SNMP GET:

- Site identification
- Input voltage measurement (per each bulk input feed)
- Total (aggregate) input current measurement, Individual circuit inputs and a total aggregate input current for each installed module/feed
- Upper voltage at remote OVP, per circuit
- Output current measurement, per circuit
- Quantity and type (description) of modules installed. Part numbers for each module
- Controller board code (e.g., PS841E\_0I4R\_DS\_V4\_VZW)
- Boost (e.g., PS2000DC73)

## Features

- AUTOMATIC Circuit to OVP Mapping
- Load Shedding Feature – to prioritize key circuits to maintain while on battery backup

## 2. Physical Specs

Input Voltage Range:	-38.0 VDC to -58.0 VDC
Input Power:	5W (maximum). Shelf powered. No external connection required.
Front Panel Interface:	None
Front Panel Display:	Interface to shelf mounted interactive display.
Backplane Interfaces:	RS485 to Galaxy Protocol (GP) bus 10/100 Base-T Ethernet
Physical Dimensions:	1.63" Tall, 4" Wide, 14.1" Deep
Operating Temperature:	-40°C to +65°C
Storage Temperature:	-40°C to +85°C
Humidity:	95% max, noncondensing
MTBF:	300,000 hours @ 25C per Telcordia SR-332
EMI:	EN55022 Class A
Safety:	UL60950 – UR/cUR with CB report
RoHS:	compliant
ESD:	EN 61000-4-2 level 4

## 3. Additional Images

