

# Power SG<sup>®</sup> DLC 2000

## Direct Load Controller



Power SG<sup>®</sup> DLC 2000 is a smart grid direct load controller enabling real-time residential load control with precision and verification. The direct load controller can measure and report the exact load of the appliance prior to load shed to provide granular verification of the load shed during an event. The DLC 2000 also works in conjunction with the TS 100 in-premises temperature sensor to enable a customer comfort program. The controller contains a meter-quality measurement chip and provides current, voltage and phase data on a real-time basis.

### Key Features:

- monitors, controls and verifies load shed
- two-way, real-time communications
- meter-quality measurement chip

## Product Specifications

### Input Power Requirements

- Voltage 77 VAC to 240 VAC
- Current 0.5 A
- Frequency 47 to 63 Hz
- Maximum Power 1.5 W
- Input Conductors #6 AWG to #14 AWG
- Through Current Capability 50 A
- Load Controller Relay 3 A, 125 VAC

### Direct Load Controller Measurements

(One controlled load per controller, All measurements on single-phase, 2- or 3-wire)

- RMS Voltage Range: 98 - 265 VAC RMS  
Accuracy:  $\pm 5\%$  of full scale ( $\pm 13.25$  VAC RMS)
- RMS Current Range: 0 - 60 A RMS  
Accuracy:  $\pm 5\%$  of full scale ( $\pm 3$  A RMS)
- Frequency Range: 47 - 63 Hz  
Accuracy:  $\pm 0.5\%$  of full scale ( $\pm 0.315$  Hz)
- Active Power Range: 0 - 10,000 W  
Accuracy:  $\pm 5\%$  of full scale ( $\pm 500$  W)

### Environmental Specifications

- Operating Temperature  $-40^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$
- Operating Relative Humidity 0% to 95%

### Physical Specifications

- Dimensions(HxWxD) 10.0" x 8.0" x 3.0"  
254.0 x 203.2 x 76.2 mm
- Weight 2.5 lbs. /1.13 kg
- Enclosure Ratings NEMA 4

### Software

- Embedded Power SG<sup>®</sup> smart grid firmware designed for interoperability with an open architecture
- Zigbee Smart Energy Profile (Optional)

### Certifications/Standards

- Certifications (BPL Global DLC003) FCC CFR47, Part 15 Subparts B and C (FCC ID SQB-NMSMOD0001), UL 60950-1:2003, CAN/CSA-C22.2 No. 60950-1:2003, EN60950-1:2001

### Communications

- Local Communications 2.4 GHz Wireless Mesh
- Mesh Network Capabilities Self Configuring Devices  
Self Healing Network  
2-Way Communications
- RF Performance ISM band 2.400-2.485 GHz
- Output Power +25 dbm
- Sensitivity -101 dbm
- RF Baud Rate 250 Kbps
- Outdoor LOS Range 6 Miles
- Device Status Reporting Every 15 Minutes  
Upon Event/Change in State