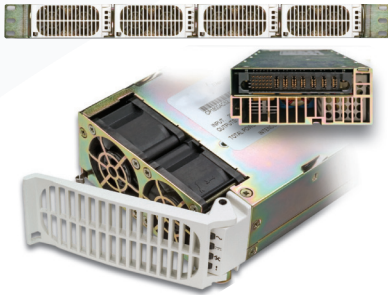


# Compact Power Line

48V DC Critical Power Solution



1RU CPL Power System

- Compact 48V DC distributed power system
- Efficiency approaching 98%
- Maximum power in minimal space
- Scalable to 80 kW
- Powering enterprise and telecommunications networks

## Overview

The Compact Power Line platform is designed to provide highly reliable DC power for 48V distributed power architectures. A single shelf configuration provides up to 11kW of 48V output power in 1U high and mounts in 19-inch or 23-inch wide frames. The CPL product platform is easily expandable for future growth. CPL is a reliable DC power solution for mission-critical enterprise and telecommunications network equipment.

## Shelf Options

The CP product line provides several shelf options with common or split DC output configurations. J85480S1 shelves have four slots for rectifiers or converters (PEMs). CPL shelves are primarily used without a controller or with a customer's controller using I<sup>2</sup>C communications. J2007001 shelves have four slots with space for a full-feature Pulsar Edge Controller. The Pulsar Edge controller has Ethernet connectivity to facilitate remote network management to monitor and control rectifiers, batteries, and distribution. CPL is ideal for a broad range of applications requiring highly efficient 48V DC power.

## Rectifier Options

CP2000 and CP2725 rectifiers are single phase, constant power rectifiers that provide 2000 Watts and 2725 Watts (respectively) of highly reliable DC power. The constant output power characteristics, extended temperature range, universal AC input, and compact size are key attributes that make this rectifier the right choice for your power needs.

## Pulsar Edge Controller

CPL features the Pulsar Edge controller delivering large system intelligence in a small system form factor. Ethernet connectivity with SNMP facilitates remote network management.

## Benefits

### Reliability

- Proven field performance
- Advanced alarming
- N+1 modularity

### Intelligence

- Industry leading controller features
- Ethernet interface for remote access
- Centralized network management

### Investment Protection

- Minimal space requirements
- Versatile configurations
- Efficient operation

### On Time Delivery

- Standard building blocks
- 4 - 6 week availability
- 24/7 support

## Total Efficiency

The Lineage Power Total Efficiency™ (TE) architecture reduces energy loss and lowers cooling costs by 50-70%. TE products will prioritize sustainable energy sources like solar, wind, water and fuel cells over traditional utility grid or diesel generator sources – and they will intelligently respond to smart grid information to reduce consumption during peak demand periods. Active Rectifier Management (ARM) and Battery Charging Optimization (BCO) features increase efficiency on current and legacy power infrastructures. The Total Efficiency architecture addresses issues end-to-end based on our proven experience and expertise in batteries, power distribution, DC energy systems, AC-DC power supplies, and DC-DC board mounted power to deliver a solution that is more safe, reliable and energy efficient than alternatives from our competitors.

## CP2000 and CP2725 Total Efficiency™ Rectifiers



The CP2000 TEZ and CP2725 TEZ high efficiency rectifiers provide significantly improved operational efficiency and are fully backwards compatible with currently deployed CPL energy systems. These high-density front-to-back airflow rectifiers are designed for minimal space utilization and are highly expandable for future growth.

The power module is available with many features including PoE isolation, RS485 communications bus for use with Lineage Power battery-plant controllers in forming an energy reserve system and redundant I<sup>2</sup>C communications bus for use with a customer's controller. This flexible and sophisticated feature set makes this front-end power supply an excellent choice for power in a variety of application spaces.

### Applications

- Enterprise networks
- Telecom equipment
- Power over Ethernet
- VoIP/soft switches
- SAN/NAS/iSCSI applications
- LAN/WAN/MAN applications
- Indoor wireless
- Routers and switches

### Key Features

- Compact 1RU form factor
- PMBus compliant dual I<sup>2</sup>C and RS485 serial bus communications
- Front panel LED indicators
- Internal variable-speed fan control
- Constant power; 52 – 58 Vdc
- Programmable output voltage; 44 – 58 Vdc
- Universal AC input
- PoE compliant
- CE marked
- RoHS 6 compliant
- Hot pluggable

### Specifications

Input	CP2000 TEZ	CP2725 TEZ
Voltage Range - Low-Line - High-Line	90 - 185 Vac (1200W) 185 - 305 Vac (2000W)	90 - 185 Vac (1200W) 185 - 305 Vac (2725W)
Input Frequency	47 - 66 Hz	47 - 66 Hz
Input Current	8.3 Amps @ 110Vac 9.7 Amps @ 240Vac	11.2 Amps @ 110Vac 13.1 Amps @ 240Vac
Inrush Transient	30 Apk max Measured at 25°C for all line conditions; does not include X-capacitors charging.	30 Apk max Measured at 25°C for all line conditions; does not include X-capacitors charging.
Input Leakage Current	2.5 mA typical 3.5 mA max Measured at 265 Vac, 60Hz	2.5 mA typical 3.5 mA max Measured at 265 Vac, 60Hz
Total Harmonic Distortion (THD)	< 5%	< 5%
Power Factor	0.98 typical from 50% TO 100% load	0.98 typical from 50% TO 100% load
Holdup Time	25 ms	20 ms @ full power 30 ms (loads below 1200W)
Power Fail Warning	5 ms, Alarm issued via PFW signal going LO 5 ms prior to the main output decaying below 40 Vdc.	5 ms, Alarm issued via PFW signal going LO 5 ms prior to the main output decaying below 40 Vdc.
EMC Conducted	FCC and CISPR22 (EN55022) Class A	FCC and CISPR22 (EN55022) Class A