

# Model 206L

## High Efficiency Cabinet Power Supply Operations Manual

THIS MANUAL CONTAINS TECHNICAL INFORMATION FOR THE MODEL 206L SERIES POWER SUPPLY. INCLUDED ARE GENERAL DESCRIPTION, OPERATIONAL DESCRIPTION, INSTALLATION, AND SPECIFICATIONS.

**THE MODEL 206L POWER SUPPLY IS DESIGNED AND MANUFACTURED IN THE USA BY EBERLE DESIGN INC., PHOENIX, ARIZONA.**

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## OVERVIEW

The Model 206L Rack Power Supply is a rack mounted high efficiency switching power supply that provides a single regulated +24VDC output for a PDA #2 or PDA #3 assembly commonly found in a 332 or 336 style cabinet. **The Model 206L is plug-in compatible with a Caltrans Model 206 Cabinet Power Supply**, and uses modern switching technology to replace the energy wasteful ferro-resonant technology of the standard Model 206.

The Model 206L provides full output regulation across changes in AC Line voltage and output load over the full operating temperature range of -34C to +74C. Power Factor Correction is also provided reducing peak AC Line input current and associated stress on wiring. The AC Line input is rated for universal 80 to 270 Vac operation at 50 or 60 Hertz.

### 1.1 OUTPUT CONFIGURATION

The Model 206L provides one DC output rated at 5 Amps over the full -30°F to 165°F (-34°C to +74°C) operating temperature range. The output is fused for over-current protection with an 8A Slow blow fuse. The output is also protected against voltage transients by a 1500 Watt suppressor.

### 1.2 INDICATORS

A green LED indicator is provided to display AC Line input status and fuse integrity. A separate green LED indicator is also provided to display output status and fuse integrity for the 24 Vdc output.

### 1.3 ELECTRICAL

#### 1.3.1 Power Requirements

AC Operating Voltage Minimum .....	80 Vac
AC Operating Voltage Maximum .....	270 Vac
AC Operating Frequency .....	45 to 65 Hz
Power Factor (120 Vac at full load) .....	0.98
Efficiency (120 Vac at full load) .....	86%

#### 1.3.2 DC Output

DC Output Voltage .....	24 Vdc +/- 2%
DC Output Current Maximum.....	5 Amps
DC Output Ripple Maximum .....	200 mVpp
<small>Note: Ripple is measured at 20MHz of bandwidth using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf capacitor.</small>	
Minimum Holdup Time (5 Amp load) .....	50 milliseconds

#### 1.3.3 Mechanical

Height (designed for card guides top and bottom) .....	6.12 inches
Width.....	5.5 inches
Depth (excluding handle and connector pins).....	7.35 inches

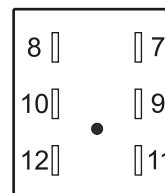
#### 1.3.4 Environmental

Storage Temperature Range .....	-45 to +85 °C
Operating Temperature Range .....	-34 to +74 °C
Humidity (non-condensing) .....	0 to 95% Relative

### 1.4 MAIN CONNECTOR

The main connector mates with a Beau S-5406 or equivalent:

Pin	Function	Pin	Function
7	+24VDC Output	10	No Connect
8	DC Ground	11	AC Neutral
9	Equipment Ground	12	AC Line +



Viewed from Connector end: