

## Features:

- Measures 11.20 x 4.00 x 1.65" / 284.5 x 101.6 x 41.9mm
- 12V Power for Powering Non-Isolated POL Converters
- Hot Swap / N+1 Redundant
- Active Single Wire Current Sharing
- Remote On/Off Control
- International Safety Approvals - UL, CSA, CE Mark (LVD) TUV



FEATURES	BENEFITS
High Power Density 16W/in3	Minimizes space within your system
1U High Form Factor	Supports low profile applications
5VSB Standby Voltage	Provides voltage source for housekeeping and monitoring circuitry
I2C Digital Control & Monitoring	Cost effective power scalability

KEY MARKETS & APPLICATIONS
<ul style="list-style-type: none"> <li>■ Distributed Power</li> <li>■ Blade Servers</li> <li>■ Mid-End Servers</li> <li>■ Network Equipment</li> <li>■ Network Attached Storage</li> <li>■ Storage Area Networks</li> </ul>

SPECIFICATIONS	1200 Watt +12V Front End Power Supply
Input Voltage Range	85-264 VAC, 47-63 Hz
Input Current Maximum	12A @ 100VAC, 8.1A @ 180 VAC, full Load
Inrush Current	35A max. cold start (per ETS 300 132-1 and bellcore specifications)
Input Protection	Single Fused (Line) 20 Amp / 250 VAC Type 3AB Axial
Power Factor	0.99 typical complies with IEC555, EN60555-2, EN61000-3-2
Efficiency	89% typical at 230 VAC Full Load Operation, 85% Typical @ 90 VAC Full Load Operation
Output Power	1200W at High Line Operation (230 VAC), Derate to 1000W
Output Voltage Range	+12 VDC (±5%)
Output Current	100A @ +12 VDC for High Line Operation (230 VAC), reduced to 83.5 A at Low Line Operation (110 VAC)
Voltage Programming	±5% of Vout nominal. Analog input signal. 11.4V + (Vprog x 0.3V) where Vprog = 0V to 4V
Standby Bias Voltage	5VSB@500mA, reference to +12VDC Return
Voltage Regulation	±2% of Vnom for any combination of line, load and temperature
Output Ripple & Noise	ETS300 132-2, 32dBnc. Bandwidth: 25Hz - 20kHz. 2mVrms pk-pk with 0.1µF ceramic and 10µF electrolytics caps
Transient Response	5% max deviation Recovery time 300µs @ 50% load step and di/dt < 1A/µs
Switching Frequency	400kHz (output)
Hold-Up Time	20ms at 1200W (typical) @ 180VAC
Remote On/Off	ON if >3V or open; OFF if <1V (max. sink 1mA) Open collector type
Current Limit Protection	110-135% of Iout Nominal
Short Circuit Protection	Self protected with auto recovery
Over Voltage Protection	+14.5-15.5 VDC max, latched. Reset condition by recycling AC Input or toggling remote on/off
Operating Temperature	-10°C to +70°C. power derating above 55°C at 2.5% per °C
Over Temperature Protection	Non latching; protection active at 110°C internal temperature, restart at 95°C (typical)
EMI	FCC-B & EN55022-B with specified filter, GR-1089-CORE
LED Indicators	Green = AC OK & DC OK, Red = Fault
Analog Status & Control	Voltage Programming (V Prog), Load sharing (I Share), Remote ON/OFF, Current Monitor (I Monitor), Over temperature (Temp Warning), Fault, PS Present, Module Enable
Digital Status & Control	I2C Option, see detailed specification for details
Shock & Vibration	IEC68-2-27, MIL-STD-810E, Telecordia GR-63-CORE
Dimensions	11.20 x 4.00 x 1.65" / 284.5 x 101.6 x 41.9mm
Weight	3.0 lbs
Safety Approvals	IEC 950 per EN60950, UL60950, CSA 22.2-950, CE Mark (LVD) TUV
Options	I2C Signals, Bezel

rev 100506

[www.lineagepower.com/oem](http://www.lineagepower.com/oem)

### Lineage Power

3000 Skyline Dr.  
Mesquite, TX 75149  
Phone: (972) 284-2000

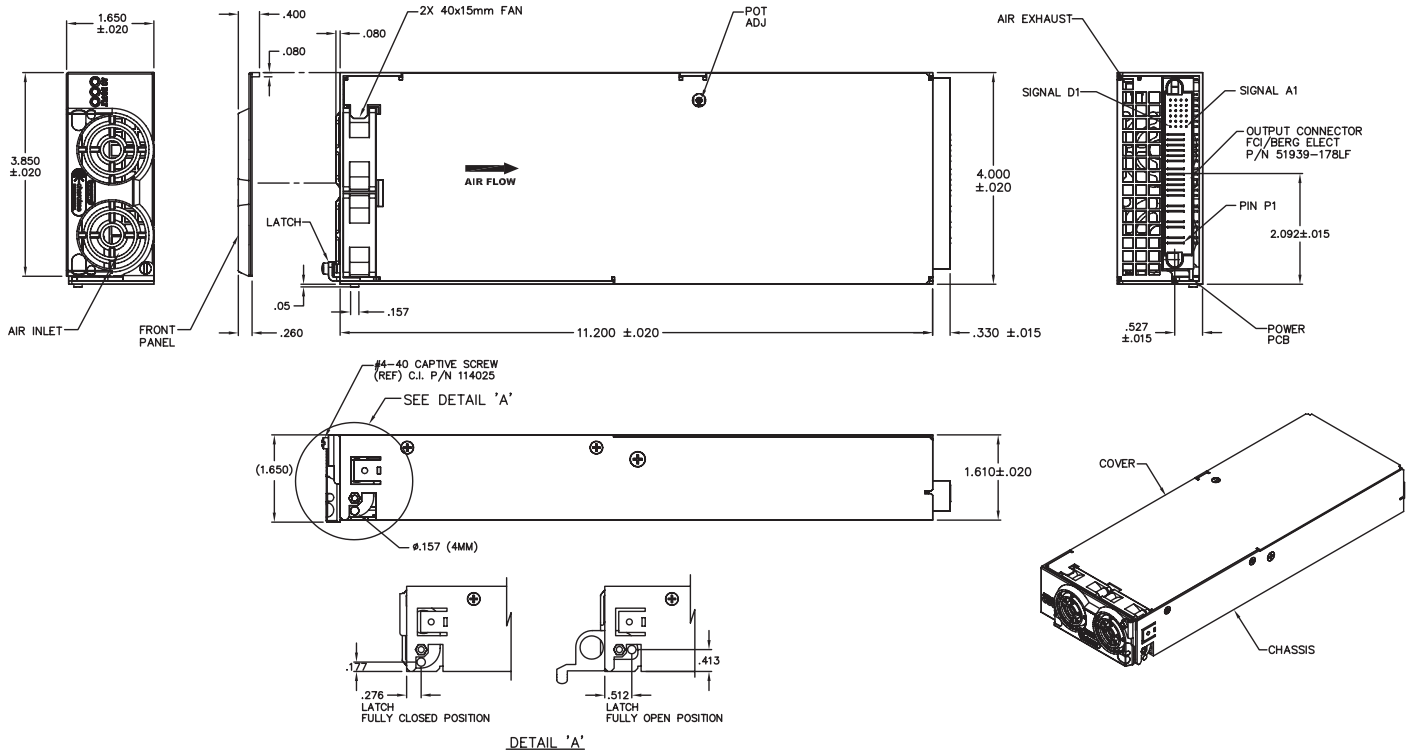
### Lineage Power

2841 Dow Avenue  
Tustin, CA 92780 USA  
Phone: (714) 544-6665

### Lineage Power (China)

1353 Chenqiao Road, Shanghai Sengpu Industrial Park  
Shanghai, 201401 China  
Phone: 021 6710 8910

## OUTLINE DRAWING



### PART NUMBER DEFINITION GUIDE:

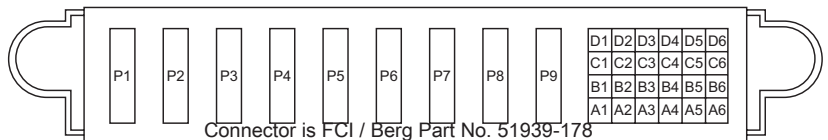
**CAR 12 12 F P X XX -1A**

**Series**  
 12=1200W  
**Output Current**  
 12=12V  
**Output Voltage**  
**Type**  
 F=Front End  
**Polarity**  
 P=Positive  
**Options**  
 X=RoHS  
 XX=Blank=Non-compliant  
 Y0=5 of 6 Compliant  
 Z0=6 of 6 Compliant  
 B=Bezel Option  
 C=I<sup>2</sup>C Option  
 BC=Both Options  
**Rev.**  
 -1A

Examples:  
 CAR1212FPY0-1A:  
 1200W/12V Front End, 5 of 6 RoHS  
 CAR1212FPBZ0-1A  
 1200W/12V Front End, Bezel, 6 of 6 RoHS  
 CAR1212FPCY0-1A  
 1200W/12V Front End, I<sup>2</sup>C, 5 of 6 RoHS  
 CAR1212FPBCZ0-1A  
 1200W/12V Front End, I<sup>2</sup>C, Bezel, 6 of 6 RoHS

### PIN OUT INFORMATION

A1	Vstb (5V)	B4	PS Present	D1	V Prog	P4	+V1 Return
A2	Vstb (5V) Return	B5	Serial Data Line	D2	OVP Test Point	P5	+V1 Return
A3	Signal Return	B6	Serial Data Clock	D3	Remote On/Off	P6	+V1 Return
A4	Write Protect	C1	I Share	D4	DC OK	P7	+V1 Output
A5	Remote Sense (+)	C2	N/C	D5	AC OK	P8	+V1 Output
A6	Remote Sense (-)	C3	Temp Warning	D6	Interrupt	P9	+V1 Output
B1	Fault	C4	I <sup>2</sup> C Address (A0)	P1	Line		
B2	I Monitor	C5	I <sup>2</sup> C Address (A1)	P2	Neutral		
B3	Module Enable	C6	I <sup>2</sup> C Address (A2)	P3	Chassis		



Mates with FCI / Berg Part No. 51866-025 (Right Angle Mounting), or 51940-117 (Straight Mounting)