

Features:

- Leading Edge Power Density, 27W/in³ in 1U Form Factor
- Constant Power Characteristic
- I²C Serial Bus and PMBus Interface
- Active Current Sharing (Single Wire)
- Microprocessor Based Design Allows for Automatic Fan Speed Control
- Optional Universal / 4-Bay 19" Rack Delivers 10kW of Power
- NEBS Shock and Vibration, Seismic Zone 4



FEATURES	BENEFITS
High Power Density 27W/in ³	More system space for application circuits and hardware
Constant Output Power	Ideally suited for battery back-up and distributed power architectures
Load Sharing & Fault Tolerant	Allows flexibility with minimum investment
Voltage Programming	Support VRLA battery requirements
Universal Input & International Certifications	Reduces logistical costs

KEY MARKET SEGMENTS & APPLICATIONS

- Distributed Power
- Cellular Base Stations
- Satellite Hubs
- RF Amplifiers
- Broadband Switchers
- ATE Equipment
- Telecom Access Nodes
- Wireless Communication

SPECIFICATIONS	2500 Watt -54V Rectifier Module
Input Voltage Range	90-264 VAC, 47-63 Hz
Input Current Maximum	16A @ 180VAC, Full Load (max)
Inrush Current	50A max. cold start (per ETS 300 132-1 and bellcore specifications)
Input Protection	Dual Fused (Line & Neutral) 20 Amp / 250 VAC Type 3AB Axial
Power Factor	0.99 typical complies with IEC555, EN60555-2, EN61000-3-2
Efficiency	92% typical at 230 VAC Full Load Operation (including OR'ing Mosfets)
Output Power	2500W at High Line Operation (180-264 VAC), 1200W at Low Line Operation (90-132 VAC); 1300W (140-179 VAC)
Output Voltage Range	-42 ~ -58 VDC with remote programming (factory set at -54V)
Output Current	46.3A @ -54 VDC for High Line Operation (230 VAC)
Standby Bias Voltage	5VSB@1A, reference to Vout Return
Voltage Regulation	±2% of Vnom for any combination of line, load and temperature
Output Ripple & Noise	Complies with ETS300 132-2, 32dBnrc. Bandwidth: 25Hz - 20kHz. 2mVrms pk-pk with 0.1μF ceramic and 10μF electrolytic caps at the output
Transient Response	5% max deviation Recovery time 300μs @ 50% load step and di/dt < 1A/μs
Switching Frequency	200kHz (primary) / 400kHz (secondary)
Hold-Up Time	16.8msec (230 VAC Full Load)
Remote On/Off	On if >3V or open; Off if <1V (max. sink 1mA) Open collector type
Current Limit Protection	110-130% of Iout Nominal
Short Circuit Protection	Self protected with auto recovery
Over Voltage Protection	-60 VDC max, latched. Reset condition by recycling AC Input or toggling remote on/off
Operating Temperature	-10°C to +70°C. power derating above 50°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 or at rack level, 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	I ² C Option and PMBus Option, see detailed specification for details
Shock & Vibration	IEC68-2-27, MIL-STD-810E, Telcordia GR-63-CORE
Dimensions	14.25 x 4.00 x 1.65" / 362 x 102 x 41.9mm
Weight	4.73lbs / 2.15kg
Safety Approvals	IEC/UL/CSA/EN60950-1, CE Mark (LVD), TUV
Options	I ² C Interface, PMBus, Bezel, 5VSB Output

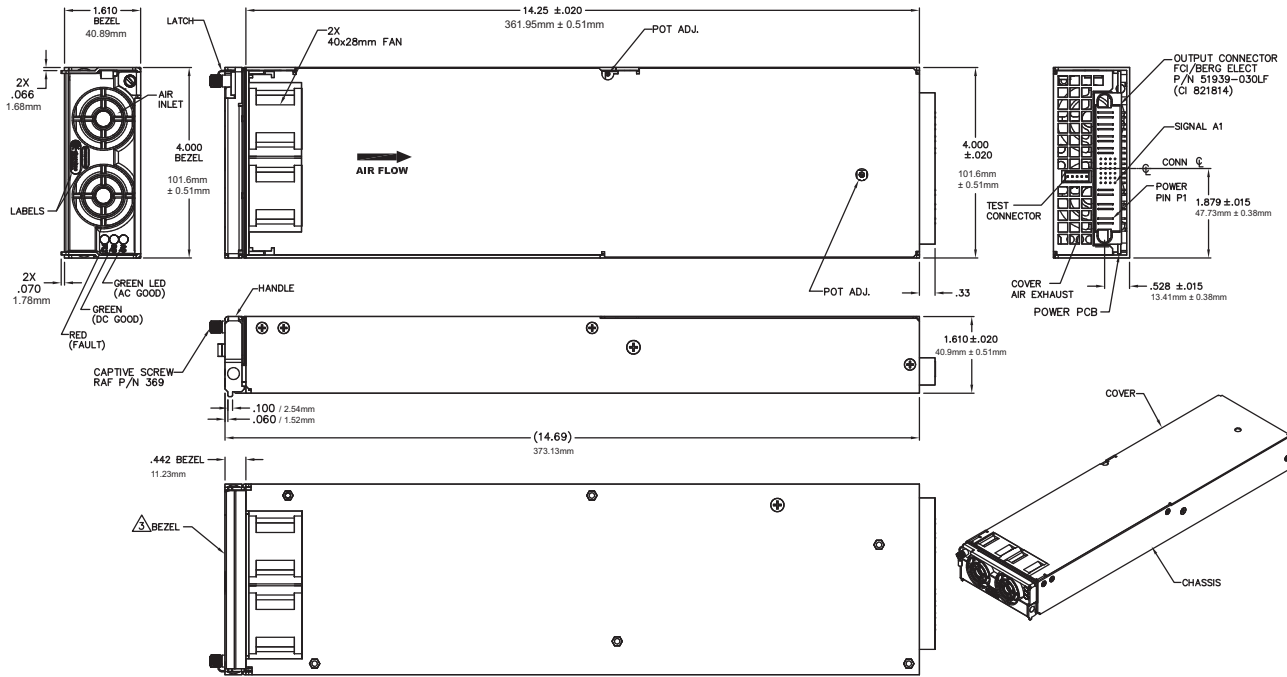
Lineage (凌骥)中国区授权代理商:

深圳市中电华星电子技术有限公司

TEL: (0755) 82531600 82531601
Email: sales@ce-power.com

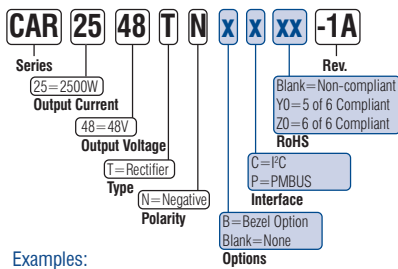
Fax: (0755) 82531605
Website: www.ce-power.com

OUTLINE DRAWING



All Dimensions in Inches (mm)
 Tolerance: .XX = $\pm .02$ in (.50 mm)
 .XXX = $\pm .010$ in (.254 mm)

PART NUMBER DEFINITION GUIDE:



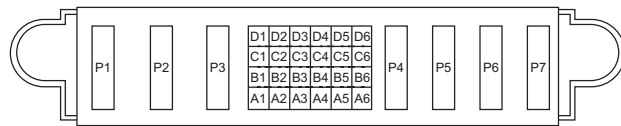
Examples:

CAR2548TNCZ0-1A
 2500W/48V Rectifier, Bezel, I2C, 6 of 6 RoHS

CAR2548TNBPY0-1A
 2500W/48V Rectifier, Bezel, PMBUS 5 of 6 RoHS

CAR2548TNBP-1A
 2500W/48V Rectifier, Bezel, PMBUS

CONNECTOR DRAWING:



Connector FCI Berg P/N 51939-030
 Mating connector FCI Berg P/N 51915-051

PIN OUT INFORMATION

A1	VSB 3.3V	B4	PS Present	D1	V Prog	P4	-Vout
A2	VSB 3.3V Return	B5	Serial Data Line	D2	OVP Test Point	P5	-Vout
A3	Signal RTN	B6	Serial Data Clock	D3	Remote On/Off	P6	Vout Return
A4	Write Protect	C1	I Share	D4	DC OK	P7	Vout Return
A5	Remote Sense (+)	C2	Protocol Select	D5	AC OK		
A6	Remote Sense (-)	C3	Temp Warning	D6	Interrupt		
B1	Fault	C4	I2C Address (A0)	P1	Line		
B2	I Monitor	C5	I2C Address (A1)	P2	Neutral		
B3	Module Enable	C6	I2C Address (A2)	P3	Chassis		