

Features:

- 1200 Watts in 1U
- Ultra High Power Density of 19W/in³
- Active Current Sharing (Single Wire)
- Remote on/off, Remote Sense, Voltage Program & Current Share Control Circuits
- Current, Voltage, AC OK, DC OK & Temperature OK
- Microprocessor based design allows for I²C communication
- Optional Universal / 5-Bay 19" Rack Delivers 6kW of Total Power
- NEBS Shock & Vibration, Seismic Zone 4



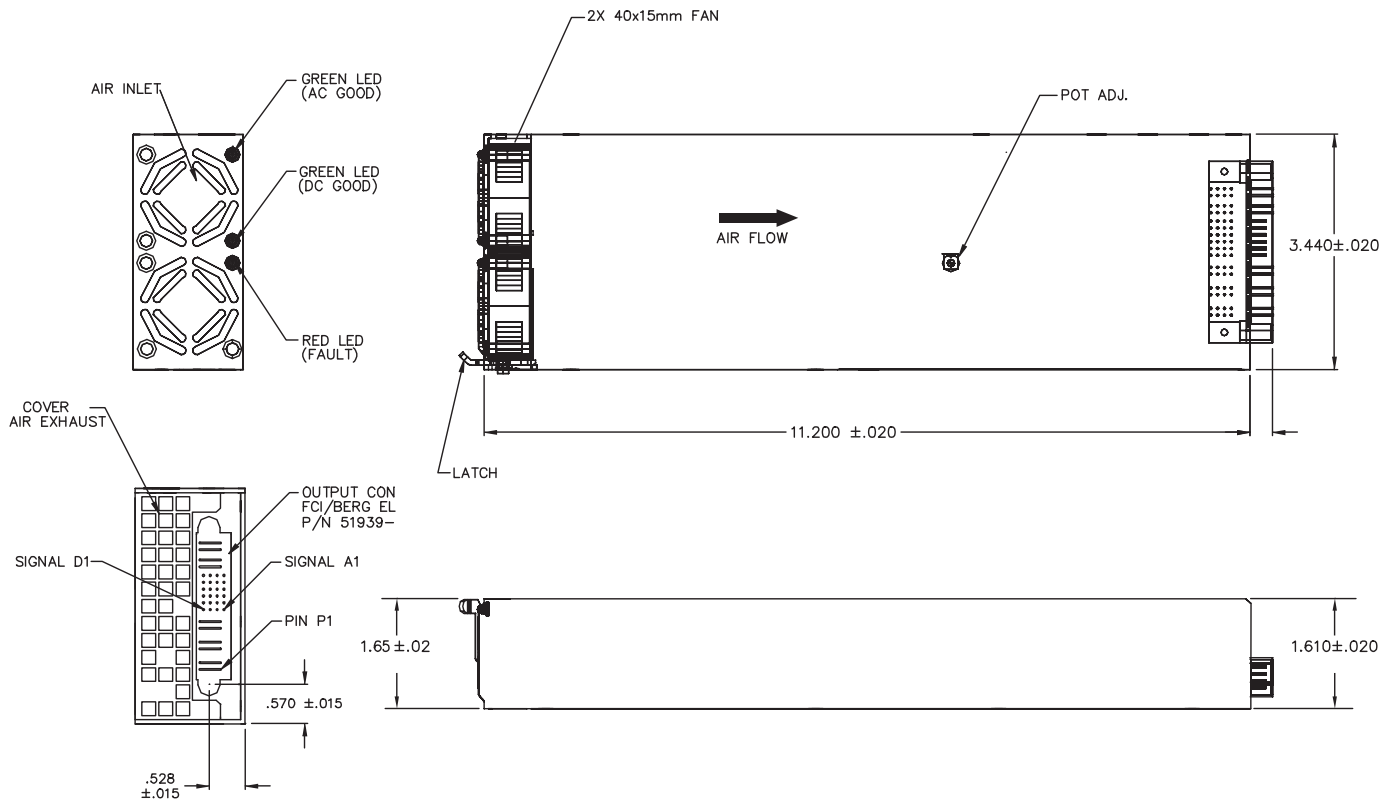
FEATURES	BENEFITS
High Power Density 19W/in ³	Leaves plenty of room for your applications
System Scalability up to 6000W	Allows flexibility with minimum investment
1U x 2U High Form Factor	Minimize space required for power needs
Load Sharing & Fault Tolerant	Excellent reliability in N + 1 operation
I ² C Digital Control & Monitoring	Ideal for monitoring, housekeeping and control

KEY MARKETS & APPLICATIONS
<ul style="list-style-type: none"> • Distributed Power • Diagnostic Equipment • Network Equipment • Automatic Test Equipment

SPECIFICATIONS	1200 Watt -54V Rectifier Module
Input Voltage Range	85-264 VAC, 47-63 Hz
Input Current Maximum	12.75A @ 100VAC, 7.9A @ 180 VAC, full load
Inrush Current	40A 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	91% 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 1000 W at Low Line Operation (90 VAC)
Output Voltage Range	-42 ~ - 58 VDC with remote programming (factory set at -54VDC)
Output Current	22.2A @ -54 VDC for High Line Operation (230 VAC), reduced to 18.5A at Low Line Operation (90VAC)
Voltage Programming	Vout = Vprog x 10 / 3 + 44.3V
Voltage Regulation	±2% of Vnom for any combination of line, load and temperature
Output Ripple & Noise	Complies to ETS300 132-2, 32dBnc. Bandwidth: 25Hz - 20kHz. 2mVrms pk-pk with 0.1μF ceramic and 10μF electrolytic caps
Transient Response	5% max deviation Recovery time 300μs @ 50% load step and di/dt < 1A/μs
Switching Frequency	200kHz (input) / 400kHz (output)
Hold-Up Time	20ms at 1KW (typical) @ 90VAC
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 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 or at rack level, GR-1089-CORE
LED Indicators	Green = AC OK & DC OK, Red = Fault
Analog Status & Control	Voltage Programming, Load sharing, Remote ON/OFF, Current Monitor, Over temperature, Fault, PS Present, Module Enable
Digital Status & Control	I ² C Option, see detailed specification for details
Shock & Vibration	IEC68-2-27, MIL-STD-810E, Telecordia GR-63-CORE
Dimensions	11.2 x 3.44 x 1.65" / 284.5 x 87.4 x 41.9mm
Weight	2.8 lbs
Safety Approvals	IEC 950 per EN60950, UL60950, CSA 22.2-950, CE Mark (LVD), TUV
Options	I ² C Signals, Bezel

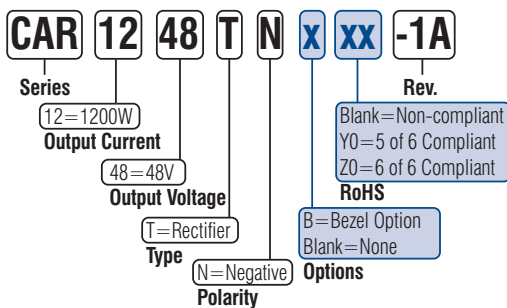
Specifications listed assume 25°C Ambient Operating Temperature and Full Load Operation unless otherwise specified. This product is qualified for use in OEM equipment and is not appropriate for stand-alone operation. The information contained within this specification is believed to be true and correct at the time of publication, however, Cherokee International accepts no responsibility for consequences arising from printing errors or inaccuracies. The information and specifications contained herein are subject to change without notice.

OUTLINE DRAWING



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

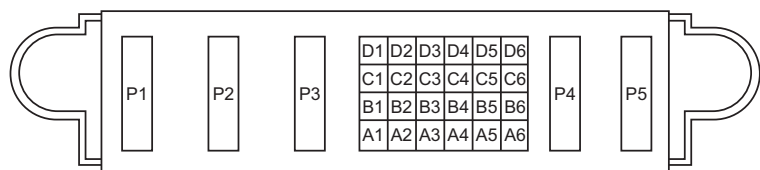
PART NUMBER DEFINITION GUIDE



Examples:

CAR1248TNZ0-1A
1200W/48V Rectifier, 6 of 6 RoHS
CAR1248TNBY0-1A
1200W/48V Rectifier, Bezel, 5 of 6 RoHS
CAR1248TNB-1A
1200W/48V Rectifier, Bezel

CONNECTOR DRAWING



PIN OUT INFORMATION

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

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