

PRELIMINARY DATASHEET

PRODUCT FEATURES (as shown in picture at right):

- **Low AC Line: 2KW Power Shelf (see *Note below for High Line)**
- **High Efficiency (96%, typical)**
- **-54VDC, 46A Output @ 120VAC (2 Rectifier Modules)**
- **1RU Height for compact installations**
- **Fitted with mounting brackets for 19" Rack**
- **Rear-Access Wiring for AC Input, DC Output, Alarms, and Communication**
- **Control Module for Full Alarms and Monitoring**
- **External Communication via TCP/IP**
- **International Safety Approvals, EMI, EMC, NEBS (All Pending)**



*** Note~ High Line (up to 264VAC): Fully configured Shelf (with 3 Rectifier Modules) is capable of 111A (6KW)**

INPUT SPECIFICATIONS:

VOLTAGE	90VAC to 294VAC (Full Power above 180VAC; (see Derating Curve for <176VAC)
FREQUENCY	47Hz ~ 63 Hz
INRUSH	<20A@220VAC (Max Cold Start) per module
CURRENT	10.9A per module (max, continuous)
PROTECTION	Input Under/Over-Voltage; Under/Over-Temp
LEAKAGE	<3.5mA across rated Input Voltage range
HOLD-UP	>20ms (220VAC, 75% Load)
EFFICIENCY	96% @ 220VAC (30%-70% Load, typical)
HARMONICS	EN61000-3-2 Class D compliant (>0.99 PF)

OUTPUT SPECIFICATIONS:

OUTPUT VOLTAGE	-54VDC (adjustable: -43.5V to -58V)
OUTPUT CURRENT	111A, max (3 Rectifier Modules); see Iout Chart
LINE REGULATION	±0.5% max, across full input range
LOAD REGULATION	±0.5% max, across full load range
RIPPLE	1.0% p-p, max (20MHz BW)
OUTPUT ADJUSTMENT	43.5Vdc ~ 58Vdc
SETPOINT ACCURACY	±0.5%
EXCURSION	±5% max (Step Load: 10-90% or 90-10%)
RECOVERY	50ms, max
OVER-CURRENT	115~135% (Auto-Recovery)
OV PROTECTION	105~115% (Recycle input to reset)

SAFETY STANDARDS:

UL/cUL	60950-1 (pending)
CE MARK	Low Voltage Directive (pending)
CB	IEC 60950-1, EN 60950-1 (pending)
TELCORDIA	NEBS GR63 CORE Zone 4 (pending)

GENERAL SPECIFICATIONS:

OPERATING TEMPERATURE	-40°C to +75°C (> +45°C, derate 26.67W/C per module)
STORAGE TEMPERATURE	-40°C to +85°C
OPERATING HUMIDITY	10% ~ 90% (non-condensing)
STORAGE HUMIDITY	5% ~ 95% (non-condensing)
COOLING	Fan-Cooled Rectifiers (front-to-back airflow)
VIBRATION	10-55Hz, 2G, 3Min Period, 60 min each (3 axes)
SHOCK	20G Peak Acceleration
RELIABILITY	>150,000 Hours (per MIL STD 217F)
SIZE (WxDxH) w/brackets	19" x 16.7" x 1.73" / 483 x 424 x 43.9mm
WEIGHT	24.5 lbs. / 11.1 kg

EMISSIONS:

EMISSIONS	EN55022 Level B (Conducted)
ELECTROSTATIC DISCHARGE	EN61000-4-2, 4KV Contact/ 8KV Air
RADIATED SUSCEPTIBILITY	EN61000-4-3, 26MHz-2000MHz, 10V/m, 80%AM
EFT/BURSTS	EN61000-4-4, 2KV
SURGES	EN61000-4-5, 2KV Earth, 1KV Line-Line
CONDUCTED IMMUNITY	EN61000-4-6, 150KHz-80MHz, 10Vrms, 80%AM
VOLTAGE DIPS	EN61000-4-10, 95% Dip, 10ms / 30% Dip, 500ms
VOLTAGE INTERRUPTIONS	EN61000-4-11, 95% reduction, 5ms
FLUCTUATIONS & FLICKER	EN61000-3-3

CONTROL SPECIFICATIONS:

CURRENT SHARING	±0.5% Module-to-Module (10%-90% Load)
OUTPUT OV ALARM	-43V to -44VDC
OUTPUT OV SHUTDOWN	-58.5V TO -59.5VDC
INPUT UV PROTECTION	Shutdown: 74V-80VAC; Restart: 81-87VAC
INPUT OV PROTECTION	Shutdown: 294-300VAC; Restart: 282-288VAC
LOW TEMP PROTECTION	Shutdown: -40°C ±5°C; 5°C hysteresis restart
HIGH TEMP PROTECTION	Shutdown: +75°C ±5°C; 5°C hysteresis restart



DERATING CURVES:

