



Features

- Wide AC input; 85 to 300 VAC
- Wide operating temperature range
- Designed for 300 mm deep ETSI compliant systems
- Input overvoltage disconnection
- Thermal protection
- Hot-swappable
- 90% typical efficiency
- International standards compliance

Description

The XR04.48G (400 W) and XR08.48G (800 W) are a family of single-phase, hot-pluggable, fan-cooled rectifiers. The high power density of this product offers the optimum 1U or 2U shelf solution for space-critical applications.

Both rectifiers offer excellent efficiency as well as wide operating temperature and wide input voltage range. Together with advanced technology they enable cost effective and reliable solutions. The typical applications for this rectifier are both in indoor and outdoor environments, which is ideal for broadband access, cable head ends, micro/pico BTS Cells, Enterprise E911, and GSM-R applications.



*1.6 kW in 19", 1 RU with Controller,
Load & Battery Distribution*



*3.2 kW in 19", 6 RU with Controller,
Load & Battery Distribution*



*2.4 kW in 19", 2 RU with Controller,
Load & Battery Distribution*

Input

Model	XR04.48	XR08.48
Input Voltage	Nominal: 100-240 VAC Fully compliant: 85-275 VAC Permitted variation: 85-300 VAC (L-PE and N-PE <250 VAC)	
Input Current	<5.5 A	<9.3 A
Frequency	47 - 63 Hz	
Power Factor	>0.98 typical	
Fuse	Two 8 A fast blow (Line & Neutral)	Two 16 A fast blow (Line & Neutral)

Mechanical Data

Dimensions	102 x 229 x 41 mm (W x D x H)
Weight	1.1 kg
Cooling	Fan-cooled, speed controlled
Insulation	4.25 kVDC primary-secondary 2.12 kVDC primary-ground 0.5 kVDC secondary-ground
Enclosure	IP20
Mounting	19in/23in/1U subrack up to 5 modules, or 2/3U rack including controller and load/battery distribution

Output

Output Voltage	46-57 VDC	
Output Power (48-57.6 VDC)	400 W	800 W
Output Current	9.1 A maximum	18.2 A maximum
Efficiency	88 % typical	90% typical
Tolerance	Vout ± 1.0%	
Transient Response	±3% at load variation 10-90% or 90-10% recovery time 50 ms	
Load Sharing	<5% of nominal current	
Ripple	<100 mV p-p (BW 20 MHz)	
Psophometric	<2 mV, according to CCITT norms	

Other Technical Data

Protection	Short circuit/arcing protection, automatic current/power limiting, input/output overvoltage protection, thermal protection.
Alarms	Fan failure Short circuit/arcing protection High temperature/output voltage Low output voltage Input voltage out of range Low fan speed (warning) Internal communication failure
Indicators	Green LED AC in range Yellow LED Low fan speed, High temperature Flashing Communications failure Red LED Module failure / shutdown
Audible Noise (nominal input)	<55 dBA according to ISO7779
Temperature	Operating: -40°C to +65°C up to 2000 m Reduced spec -40°C to -20°C Derated output power 65°C to 75°C For 3000 m altitude derate by 5°C Storage: -60°C to +85°C
MTBF	>350,000 hours (without fan) at 25°C to MIL-HDBK-217F-2

Standards

Inrush Current	ETSI EN 300 132-1
Harmonics	EN 61000-3-2
EMC	ETSI EN 300 386 V.1.3.2 EN 61000-6-1, EN 61000-6-3 EN55024 performance criterion A EN 61000-6-2, EN 61000-6-4 EN 55022 Class B Telcordia NEBS GR1089
Safety	IEC 60950-1, EN 60950-1, CAN/CSA-C22.2 60950-1-3
Environment	Storage: ETSI EN 300 019-2-1 Transport: ETSI EN 300 019-2-2 Operation: ETSI EN 300 019-2-3 Damp Heat: IEC 60068-2-78

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