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# Cordex® HP 2.4kW

## Modular Switched Mode Rectifier



- High performance compact 50A rectifier for 48V telecom application
- High efficiency (96.2%) for reduced OPEX and carbon footprint
- Extended operating temperature range up to 75°C for deployment in the harshest outdoor environments
- Multiple configurations delivering up to 12kW in a compact 23" 1RU shelf
- High power density (28W/in<sup>3</sup>) yields more space for revenue generating equipment
- Wide AC input operating range for global installation requirements

### **Cordex® High-Performance (HP) rectifiers make a proven, reliable platform even better, with significant advancements in efficiency and performance.**

In a compact, fan-cooled design, HP rectifiers open the possibility to wider ranges of applications and immediate OPEX/CAPEX savings, reducing total cost of ownership and impact on the environment.

The Cordex® HP 2.4kW is a perfect solution for various small to large 48VDC capacity applications including DAS, central office, headend, backhaul and wireless base stations. It is particularly



suitable for high density telecom applications and able to deliver 250A or 12kW per compact 1RU shelf. Unlike other rectifiers in its category, the Cordex® HP 2.4kW provides 100% nominal power up to 55°C ambient and at least 2000W up to 65°C. With a high operating efficiency, high power density and broad temperature operation, HP series rectifiers are also ideal for harsh outside plant enclosure installations.

Local and remote setup, adjustment and control are a simple, single-step process with the Cordex® CXC System Controller. By utilizing TCP/IP technology, complete configuration and monitoring of power equipment is possible through a network web browser.

# Cordex® HP 2.4kW 48V Modular Switched Mode Rectifier

P/N: 0100003-001

Electrical	
<b>Input Voltage:</b>	<b>Nominal:</b> 208 to 277VAC <b>Operating:</b> 187 to 310VAC <b>Extended:</b> 90 to 187VAC (de-rated power)
<b>Input Frequency:</b>	44 to 66Hz
<b>Power:</b>	2400W continuous (1200W output @ 120VAC Input)
<b>Power Factor:</b>	>0.99 (50 to 100% load)
<b>THD:</b>	<5%
<b>Efficiency:</b>	96.2%
<b>Output Voltage:</b>	44 to 58VDC
<b>Output Current:</b>	44.5A @ 54VDC (50A max @ 48VDC) (~25A @ 48VDC at 120VAC Input)
<b>Load Regulation:</b>	<±0.7% (static)
<b>Line Regulation:</b>	<±0.1% (static)
<b>Transient Response:</b>	±3% for 40 to 90% load step
<b>Noise:</b>	<b>Voice band:</b> <38dBmC <b>Wide band:</b> <20mV RMS (10kHz to 10MHz) <150mV pk to pk (10kHz to 100MHz)
<b>Psophometric Noise:</b>	<2mV RMS
<b>Acoustic:</b>	<60dBa @ 1m (3ft), 30°C
Mechanical	
<b>Dimensions:</b>	<b>mm:</b> 41H x 104x 333D <b>inches:</b> 1.6H x 4.1W x 13.1D
<b>Weight:</b>	1.76kg (3.9lbs)
Environmental	
<b>Temperature:</b>	<b>Operating:</b> -40 to 75°C (-40 to 176°F); full rated output up to 55°C (131°F); >2000W @ 65°C (149°F) <b>Storage:</b> -40 to 85°C (-40 to 185°F)
<b>Humidity:</b>	0 to 95% RH non-condensing
<b>Heat Dissipation:</b>	<500 BTU per hour (worst case)
Agency Compliance	
<b>Safety:</b>	CSA/UL/IEC/EN 60950-1 CE Marked
<b>EMC:</b>	ETSI 300 386 <b>Emissions:</b> • CFR47 (FCC) Part 15 Class A • EN 61000-3-2, 3-3 <b>Immunity:</b> • EN 61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-11 • ANSI/IEEE C62.41 CatB3

Cordex® 48-2.4kW Rectifier Shelves	
<b>23in 1RU universal mount</b> <b>12,000W</b> <b>P/N 0300057-001</b>	
	
<b>Rectifiers:</b>	5 x CXRF HP 48-2.4kW
<b>Distribution:</b>	Bulk power for external distribution
<b>Dimensions:</b>	<b>mm:</b> 44H x 537W x 420D <b>inches:</b> 1.75H x 21.1W x 16.5D
<b>Weight:</b>	5.7kg (12.6lbs)
<b>19in 1RU universal mount</b> <b>9,600W</b> <b>P/N: 0300040-001</b>	
	
<b>Rectifiers:</b>	4 x CXRF HP 48-2.4kW
<b>Distribution:</b>	Bulk power for external distribution
<b>Dimensions:</b>	<b>mm:</b> 44H x 438W x 420D <b>inches:</b> 1.75H x 17.3W x 16.6D
<b>Weight:</b>	4.5kg (9.9lbs)
<b>Communications Ports:</b>	CAN: interface to control rectifiers & smart peripherals



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