

# Power

## Cordex HP™ 2.0kW

48Vdc Modular Switched Mode Rectifier



Cordex HP™ 2.0kW Rectifier

- › High performance switches mode rectifiers provide 94% efficiency for reduced operating expenses and carbon footprint
- › Available in 41.7A @ 48Vdc
- › Universal, wide range AC input for a variety of global installation requirements
- › Hot swappable, 2RU ultra compact design
- › Backwards compatible with Cordex 1.8kW shelves and power solutions enabling cost effective system upgrade

**Cordex High-Performance 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 2.0kW is a perfect solution for various 48Vdc capacity applications for small to medium applications including DSLAMS, DLC's, microwave, backhaul and wireless base stations. With a high operating efficiency and broad temperature operation, HP series rectifiers are also ideal for harsh outside plant enclosure installations.

The Cordex HP 2.0kW is backward compatible with existing Cordex 1.8kW shelves and systems providing users an easy upgrade path to greater power density and reduced Op-Ex.

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

# Cordex HP™ 2.0kW 48Vdc Modular Switched Mode Rectifier

Part Number: 010-622-020

## Electrical

<b>Input voltage:</b>	
Nominal:	187 to 277Vac
Operating:	187 to 312Vac
Extended:	176 to 90Vac (de-rated power)
<b>Input frequency:</b> 45 to 66Hz	
<b>Power factor:</b> >0.99 (50 to 100% load)	
<b>THD:</b> <5% (@ 208Vac)	
<b>Efficiency:</b> >94.2%	
<b>Output voltage:</b> 42 to 58Vdc	
<b>Output current:</b> 41.7A @ 48Vdc (nominal I/p)	
	26A @ 48Vdc (@ 120Vac input)
<b>Output power:</b> 2000W continuous @ nominal I/p	
	1248W (@ 120Vac)
<b>Load regulation:</b> <±0.5% (static)	
<b>Line regulation:</b> <±0.5% (static)	
<b>Transient response:</b> ±2% for 40 to 90% load step	
<b>Noise:</b>	
Voice band:	<38dBnC
Wide band:	<30mV RMS (10kHz to 10MHz)
	<150mV pk to pk (10kHz to 100MHz)
<b>Psophometric:</b> <2mV RMS	
<b>Acoustic:</b> <60dBa @ 1m (3ft), 30°C	

## Performance / Features

<b>Indicators:</b>	AC mains OK — green LED
	Module OK — green LED
	Module fail — red LED
<b>Controls:</b>	CAN interface to CXC
<b>Adjustments:</b>	Float voltage
<b>(via CXC controller)</b>	Equalize voltage
	High voltage alarm
	Low voltage alarm
	High voltage shutdown
	Current limit
	Slope
	Start delay timers
<b>Protection:</b>	Current limit/short circuit
	Start delay
	Input/output fuses
	Output high voltage shutdown
	Power limiting
	Thermal foldback/shutdown
	Input transient
	AC low line foldback/shutdown
	AC high voltage shutdown

## Mechanical

<b>Dimensions:</b>	
mm:	86H x 102W x 270D
inches:	3.4H x 4.0W x 10.6D
<b>Weight:</b> 2.3kg (5.1lbs)	

## Environmental

<b>Temperature:</b>	
Standard:	-40 to 55°C (-40 to 149°F)
Extended:	-40 to 75°C (-40 to 167°F)
	derated power (~1800W @ 65°C (149°F))
Storage:	-40 to 85°C (-40 to 185°F)
<b>Humidity:</b> 0 to 95% RH non-condensing	
<b>Elevation:</b> -60 to 2000m (-198 to 6600ft)	
<b>Heat dissipation:</b> <549 BTU per hour	

## Shelves

**19/23" 4-module P/N: 030-749-20**

**23" 5-module P/N: 030-747-20**

### >19/23" shelf (4 modules)

<b>Dimensions:</b>	
mm:	89H x 438W x 310D
inches:	3.5H x 17.2W x 12.2D
<b>Weight:</b> 8.5kg (19lbs)	
<b>Mounting:</b> 19" flush or center mount	
	23" center mount only

### >23" shelf (5 modules)

<b>Dimensions:</b>	
mm:	89H x 541W x 310D
inches:	3.5H x 21.3W x 12.2D
<b>Weight:</b> 10kg (22lbs)	
<b>Mounting:</b> 23" flush or center mount	

### Connections:

<b>Input:</b>	Terminal blocks
	Mini-fit connectors (23" only)
<b>Output:</b>	Bus adapters with 3/8" on 1" center holes
<b>Chassis ground:</b>	1/4" studs on 5/8" centers
<b>CAN communication:</b>	RJ12 offset

## Agency Compliance

<b>Safety:</b>	CSA C22.2 No 60950-1-03
	UL 60950-1 1 <sup>st</sup> edition
	CE marked
	IEC/EN 60950-1
<b>EMC:</b>	ETSI 300 386
<b>Emissions:</b>	CFR47 (FCC) Part 15 Class B
	ICES-03 Class B
	EN55022 (CISPR 22) Class B
	C-Tick (Australia)
	EN 61000-3-2
	EN 61000-3-3
<b>Immunity:</b>	EN 61000-4-2
	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-5
	EN 61000-4-6
	EN 61000-4-11
	ANSI/IEEE C62.41 Cat B3