

# 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.

*Your Power Solutions Partner*



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

Part Number: 010-622-020

## Electrical

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

## Performance / Features

Indicators: ..... AC mains OK—green LED  
Module OK—green LED  
Module fail—red LED  
Controls: ..... CAN interface to CXC  
Adjustments: ..... Float voltage  
(via CXC controller) Equalize voltage  
High voltage alarm  
Low voltage alarm  
High voltage shutdown  
Current limit  
Slope  
Start delay timers  
Protection: ..... 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

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

## Environmental

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

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

### >23" shelf (5 modules)

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

### Connections:

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

## Agency Compliance

Safety: ..... CSA C22.2 No 60950-1-03  
UL 60950-1 1<sup>st</sup> edition  
CE marked  
IEC/EN 60950-1

EMC: ..... ETSI 300 386  
Emissions: ..... 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  
Immunity: ..... 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