

# Power

## Cordex™ 650W

48Vdc Modular Rectifier Shelf Systems



Cordex 2.6kW shelf power system

- › Single shelf modular rectifier solution provides multiple 48V configurations up to 67A for various 48Vdc applications
- › Convection cooled design for high reliability in harsh industrial environments
- › Front access options for space restricted enclosures
- › Integrated DC system capability with controller and distribution module options

Alpha's Cordex series includes a complete range of modular 650W rectifier shelf systems to meet the needs of worldwide telecommunications applications.

Cordex 650W modular shelf systems are available to fit various 48Vdc application needs. 19" rear access solutions are available in a five-module (3.2kW) bulk output version as well as a four-module (2.6kW) integrated solution with an AM plug-in breaker distribution module. Complete front access versions are also available in 23" (4-module) and 19" (3-module) which include a distribution module accomodating both plug-in breakers and GMT fuses. CXCI integrated controllers are standard with all 650W shelf systems.

Alpha Cordex 650W rectifier modules feature complete hot-swappability, high efficiency with power factor correction, unique power limiting capability and wide range input. Convection cooling and an ultra compact design also make Cordex CXS shelf systems ideal for the telecommunications industry.

## Cordex™ 650W 48Vdc Modular Rectifier Shelf Systems

### Cordex 48-650W Rectifier Shelves



#### >19/23in 2RU universal mount

Cordex 2.6kW shelf power system  
 P/N: .....030-728-20  
 Rectifiers: ..... 4 x CXRC 48-650W  
 Controller: ..... 1 x CXCI  
 Distribution: ..... (4) AM bullet type breakers



#### >19/23in 2RU universal mount

Cordex 3.2kW bulk power system with CXCI controller.  
 Optional LVD shunt with battery breaker  
 P/N: .....030-782-20  
 Rectifiers: ..... 5 x CXRC 48-650W  
 Controller: ..... 1 x CXCI  
 Distribution: ..... Bulk power for external distribution



#### >23in 2RU front access

Cordex 2.6kW front access shelf power system  
 P/N: .....030-722-20  
 Rectifiers: ..... 4 x CXRC 48-650W  
 Controller: ..... 1 x CXCI  
 Distribution: ..... (4) AM bullet (10) GMT fuse



#### >19in 2RU front access

Cordex 1.9kW front access shelf power system  
 P/N: .....030-727-20  
 Rectifiers: ..... 3 x CXRC 48-650W  
 Controller: ..... 1 x CXCI  
 Distribution: ..... (4) AM plug-in (10) GMT fuse

### Electrical

#### Input Voltage (120VAC model):

Operating: .....90 to 140Vac (output power 650W)  
 Extended: .....90 to 70Vac (derated output power)  
 Power output: .....650W at nominal with 120Vac rectifier

#### Input voltage (100 to 240VAC model):

Operating: ..... 176 to 320Vac (output power 650W)  
 Extended: ..... 176 to 90Vac (derated output power)  
 Operating: ..... 100 to 140Vac (output power 500W)  
 Power output: .....650W at nominal 208 to 240Vac & 500W at nominal 120Vac with 240Vac rectifier

Universal input current: ...3.0 to 3.5A (nominal Vac)  
 4.9A max. @ 150Vac  
 120Vac model  
 input current: .....6.0 to 6.6A (nominal Vac)  
 8.1A max. @ 88Vac

#### Output current per rectifier:

120Vac model: ..... 13.5A @ 48Vdc (120Vac)  
 12A @ 54Vdc (120Vac)  
 100 to 240Vac model: ..... 13.5A @ 48Vdc (240Vac)  
 12A @ 54Vdc (240Vac)  
 10.4A @ 48Vdc (120Vac)  
 9.2A @ 54Vdc (120Vac)

### Mechanical

#### >19" Shelves

Dimensions:  
 mm: .....89H x 435W x 302D  
 inches: .....3.5H x 17.1W x 11.9D  
 Weight: .....6.9kg (15.5lbs)

#### >23" Front Access Shelf

Dimensions:  
 mm: .....89H x 544W x 307D  
 inches: .....3.5H x 21.4W x 12.0D  
 (excludes optional fan tray and baffle)  
 Weight: .....16.8kg (37lbs)  
 (fully equipped with four rectifiers)

Note: Shelf P/Ns DO NOT include modules or distribution breakers  
 Weights DO NOT include modules  
 Dimensions do not include mounting bracket

#### Communication ports:

CAN: .....Interface to control rectifiers  
 Smart peripherals  
 Ethernet: ..... 10/100 Base-T for TCIP/SNMP features

### Environmental

#### Temperature:

Standard: .....-40 to 50°C (-40 to 122°F)  
 Storage: .....-40 to 85°C (-40 to 185°F)  
 Humidity: .....0 to 95% RH non-condensing  
 Elevation: .....-500 to 3000m (-1640 to 9840ft)  
 Cooling: .....Natural or forced convection, vertical airflow

### Related Components

Cordex™ rectifier CXRC 48-650W  
 Cordex™ controller CXCI  
 AM plug-in breakers  
 GMT style fuses

### Agency Compliance

CSA: .....CSA C22.2 No 60950-1-03  
 UL: .....Std. No 60950-01  
 CE: .....EN60950