# Cordex<sup>™</sup> 650W

Modular Switched Mode Rectifier



CXRC 48-650W

- Available in 13.5A @ 48VDC
- Universal 120V/20 to 240V single phase AC input
- Power limiting and wide range AC input
- 91% efficiency and power factor correction
- Convection cooled
- Hot swappable, 2RU ultra compact design

Cordex rectifiers bring advanced technology to the DC power industry. Innovative engineering combines the best in efficiency and reliability meeting the power requirements for a variety of system applications.

The Cordex 650W rectifier is available in a choice of 19" or 23" shelf configurations. Either power system option comes complete with distribution, controller, and four rectifiers. With 2.6kW total output per shelf, it is an ideal solution to meet the needs of applications requiring lower power.

Local and remote setup, adjustment, and control is 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 650W Modular Switched Mode Rectifier

# Rectifier Module(s)

#### Electrical

Input voltage (120VAC model)

Operating:

90 to 140VAC (output power 650W)

Extended

90 to 70VAC (derated output power) 650W at nominal 120VAC

Power output:

Universal input voltage (100 to 240VAC model)

Operating: Extended:

176 to 320VAC (output power 650W) 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

Input frequency:

45 to 70Hz

Power factor:

>99% <5%

THD Efficiency:

>91% (1% loss for 120VAC model)

Output voltage:

42 to 58VDC

Output current:

12A @ 54VDC (13.5A max.)

Static <±0.5%

Load regulation:

Dynamic <±2% for 50 to 100% load step

2ms recovery time

Line regulation:

Static <±0.1% Dynamic <±1% for any change within rated

limits

Wide band noise:

<30mVrms

<150mVp-p

Psophometric noise:

<1mV

#### Mechanical

Dimensions

mm:

88.4H x 71.6W x 242D

inches Weight:

3.4H x 2.8W x 9.5D 1.4kg (3lb)

**Features** 

AC mains OK - green LED Indicators:

Module alarm-red LED Natural convection

Cooling:

Adjustments:

(via CXC Controller) Float and equalize voltage

Battery test voltage High and low voltage alarms High voltage shutdown

Current limit Start delay time

Slope %

Current limit/short circuit Protection:

Input/output fuses

Output high voltage shutdown Output power limiting Thermal foldback/shutdown

Input transient

AC low line foldback/shutdown AC high voltage shutdown

### Environmental

Temperature

Operation:

-40 to 50°C (-40 to 122°F)

(power derated up to 70°C/158°F)

Storage:

-40 to 85°C (-40 to 185°F) 0 to 95% RH non-condensing

Humidity: Elevation:

-500 to 3000m (-1640 to 9840ft)

Heat dissipation:

<219 BTU per hour

## Shelves

#### Mechanical

19" shelf

Dimensions

mm:

88.9H x 444W x 279.4D 3.5H x 17.5W x 11D

inches:

Weight:

8.5kg (18.7lb)

Mounting:

Fits 19" rack flush mount

23" shelf

**Dimensions** 

mm:

133H x 533W x 279.4D

inches:

5.25H x 21W x 11D 12.7kg (28lb)

Weight: Mounting:

Fits 23" rack center mount

Note: Consult factory for other 12", 19" or 23" shelf configurations.

#### Connections

Input:

Dual feed terminal blocks

4 to 6mm2 (12 to 10AWG)

Output:

1/4" studs on 5%" centers 1/4" stud

Chassis ground: CAN communication:

RJ 12 offset

# Standards

The Cordex 650W is designed to meet the following

Safety:

CSA C22.2 No 60950-1-03

UL 60950-1 1st Edition

CF marked

IEC/EN 60950-1 ETSI 300 386

EMC: 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:

FN 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