

# Centurion Rectifier System

The Centurion Rectifier System comprises a low profile 3.5" (2 RU) shelf which accommodates up to three 550 watt, -48 or +24 volt hot-swap rectifiers, plus a voltage control and alarm module. The system is scalable/adaptable for N, N+1 or N+2 configurations. And is ideal for powering network transmitters.

Front panel test points and system voltage adjustment pot are provided for fine-tuning output to the requirements of sensitive loads, charging batteries, and to optimize load sharing between Centurion Rectifier shelves.

Local and remote monitoring is provided by alarm contacts which report system off, as well as major and minor rectifier conditions via alarm contacts and front panel warning LEDs.

The Centurion System is engineered for compatibility with NEWMAR's PFM-400, Power Function Manager to create an integrated power system with metering, alarms, low voltage disconnect and distribution circuit breakers (see catalog page 7 for details.)



## Features

- 550 watt rectifier units, 48 or 24 volt, slide and lock into the Centurion Shelf
- Shelf accommodates up to three rectifiers—1650 watts total
- Scalable/adaptable hot swap configuration: N, N+1, N+2
- Front panel status indicators, output voltage test points and voltage adjustment potentiometer

- Relay contacts for output OK, minor and major alarms
- Forced air cooling of rectifiers extends component life
- 115/230 VAC shelf/rectifier input—easily adapts to available site power
- Shelf adapts for 19" or 23" rack; center or flush mount (four-point cabinet mount optional)

## Rectifier Specifications

**Models:** CR48-10, CR24-20

**Input Voltage/Frequency:** 85-264 VAC\* / 47-63 Hz.

**Input Amperage:** 6 amps @ 115V and full load, 3 amps @ 230V and full load

**Input Frequency:** 47-63 HZ.

**Power Factor:** .96-.98

**Output Voltage/Amperage\*:**

CR48-10: -54.4 VDC, adjustable 50-59 VDC, 10 amps continuous  
CR24-20: +27.2 VDC, adjustable 25-29.4 VDC, 20 amps continuous  
\* 100 % output power available from 105 to 264 VAC; Derate output linearly from 100% @ 105 VAC to 80 % @ 85 VAC

**Regulation:** +/- 2 %

**Ripple:** CR24-20: 150 mV

CR48-10: 250 mV

**Protection:** Over-voltage, current limiting, over-temp, forced air cooling, input and output fuses

**Indicators:** Front panel LED indications: "DC OK/DC FAIL"

**Operating Temperature:** -10°C to +60°C; 100% load from 0°C to +50°C; Derate linearly to 80% load from +50°C to +60°C and 0°C to -10°C

**Weight:** 6.0 lbs., 2.5kg

**Designed to:**

EN55022 Class A, EN61000-4-2,3,4,5,6,8,11, EN61000-3-2,3

**Approvals:** UL 1950, CE

## Rectifier Shelf Specifications

**Model:** CRS-48/CRS-24

**Input:** 115/230 VAC nominal, 47-63Hz.

**Capacity:** Up to Three Centurion Rectifiers, -48 or +24 volt  
Front panel voltage test points and system single point voltage adjustment

## Alarms/Indicators:

- Output OK (Form A)
- Minor Alarm (Form C)
- Major Alarm (Form B)
- Battery Over-Temperature (with optional sensor)
- 10 segment LED output current bar graph

**Mounting:** 19" or 23" rack; center or flush mount (four-point cabinet mount optional)

## Options

- PFM-400, Power Function Manager creates a fully integrated power system with Metering, alarms, low voltage disconnect, and distribution circuit breakers. (See catalog page 7 for details.)
- CBK, Centurion DC Connect Kit connects one Centurion Rectifier Shelf to one PFM 400



Powering the Network