

Centurion III Shelf with DC-DC Converter

New!



Power -48, 24 and 12 Volt Site Equipment from One System.

Features

- 19", 2U rack mount shelf with integrated power distribution
- 90-250 VAC input, Power Factor Corrected
- 2 power bays accept 1000 or 2000 watt modular rectifiers
 - 74 amp, 4000 watt total max. output capacity, (37 Amp, 2000 Watt, N+1) @ - 48 VDC
- 2 power bays accept DC-DC modules
 - -48V to 12V and -48V to 24V
- Output temperature compensated for precise battery charging
- -48VDC circuit breaker distribution capacity with tripped breaker alarm
- 10 DC circuit breaker distribution capacity, with tripped breaker alarm
- 1 each DC-DC converter output circuit breaker distribution with tripped breaker alarm
- Master disconnect breakers for two 48 volt battery banks, with tripped breaker alarm
- Controller with digital display of up to three system DC system parameters with TCP/IP interface and SNMP monitoring/logging
- Alarm contacts monitor major system functions
- Low voltage disconnect built in
- Easily configures to meet site power requirements

Complete system design and assembly to your application parameters: Rectifier and DC-DC configuration, circuit breaker installation, and programing of alarms and monitors. Installation in a relay rack with batteries and wiring also available.

48V Rectifier Configurations

Watts Per Rectifier	# of Rectifiers Installed	
	1	2
2000	18A (1000W)	36A (2000W)
1000	37A (2000W)	74A (4000W)

DC Converter Configurations

Voltage Conversion	1	2
48 to 24V	560W	1120W
48 to 12V	560W	1120W

Preliminary specifications subject to change without notice.



Powering the Network 3-13

Centurion III Shelf with DC-DC Converter

AC Input

Nominal:	230V
Voltage Range:	90-300V (derate @ 115 input)
Frequency Range:	45-65 Hz
Power Factor:	>0.99
Efficiency:	>94% (from 30-95% output power)

DC Output

Voltage	-48 volt, constant power
Output Ratings:	48V to 58V
Nominal Voltage:	48V
Rated Voltage:	58V

Power

Rated maximum System Output Power: 4000W @ -48V

Polarity:	Positive earth.	
Individual Rectifier Power:	<u>1000 watt</u>	<u>2000 watt</u>
Amperage @ 230 vac in	7	12
Amperage @ 115 vac in*	12	13

* 1kW derated to 650W @ 115VAC, 2kW derated to 1300W @ 115VAC

DC Distribution

Load:	Up to 12 load circuit breakers (6 - 63A)
Battery:	Up to 2 battery circuit breakers (max. 100A)

Monitoring and Control

Display:	Multi-lingual alpha numeric backlit display Serial: 1x USB port on front panel for local PC interface
Communications:	TCP/IP: Ethernet interface for communication using SNMP protocol and internal web based configurator (optional) HTTPS capable Modbus: Supported via TCP/IP
LED Indicators:	Green: Power on/monitor OK Yellow: Non urgent alarm Red: Urgent alarm
Audible:	90dBA buzzer mappable to user defined conditions
Controls:	3x push buttons for parameter setting or viewing on front panel

Signal Inputs:

Serial bus for rectifier control and interface to peripheral modules
6x spare general purpose inputs (analogue/digital)
2x temperature sensors (one fitted)

Alarms:

Relays: 3x alarm and control relays, two of which can be mapped for customized alarm settings (expandable)

Alarm Contacts:

Volt Free Contacts: 0.3A @ 100V (0.15A @ 160V)

Logging Capacity:

Periodic Log: Up to 16,384 records (dependant on number of parameters logged)

Event Log: Up to 16,384 records (dependant on number of parameters logged)

Relay Outputs: Mini combicon to accept 1.5mm wire

USB Port: USB mini B

Connections:

Environmental

Ambient Temperature:	Nominal: 25+/-5° C
Range:	-10° C to +70° C (maximum output power is derated above +50° C)
Humidity:	5-95% RH (non-condensing)
Altitude:	<8,202 ft., De-rate maximum ambient temperature by 4° C per 3,280 ft. above sea level.

Mechanical

Shelf: Dimensions	19" W x 3.5" H x 15.35" D
Weight:	19.84 Lbs. (excluding rectifier modules)
Rectifiers: Dimensions	4.25" W x 2.75" W x 11.1" D
Weight:	3.15 Lbs
Cooling:	Forced cooled

Compliances

Safety:	EN60950
Electrostatic Discharge:	CISPR24
Radiated Radio Frequency:	CISPR22
AC Harmonics:	EN61000-3-2
AC Flicker and Fluctuation:	EN61000-3-3
Other:	CE & RoHS compliant

DC-DC Converter

DC Input	CIII4824	CIII4812	DC Output	CIII4824	CIII4812
Nominal Input Voltage:	48V DC	48V DC DC	Nominal Output Voltage:	24V DC	12V DC
Input Voltage Range:	40-60V DC	40-60V DC	Output Voltage Range:	22-26V DC	11-14V DC
Protection			Maximum Output Current:	25.0A	40.0A
Fuses:	Fuse in the positive input with crowbar diode		Maximum Output Power:	650W	560W
Input Voltage:	Auto shutdown, auto restart when correct voltage restored		Peak Efficiency:	93.0%	90.0%



Powering the Network