

Sentry : -48 VDC Applications

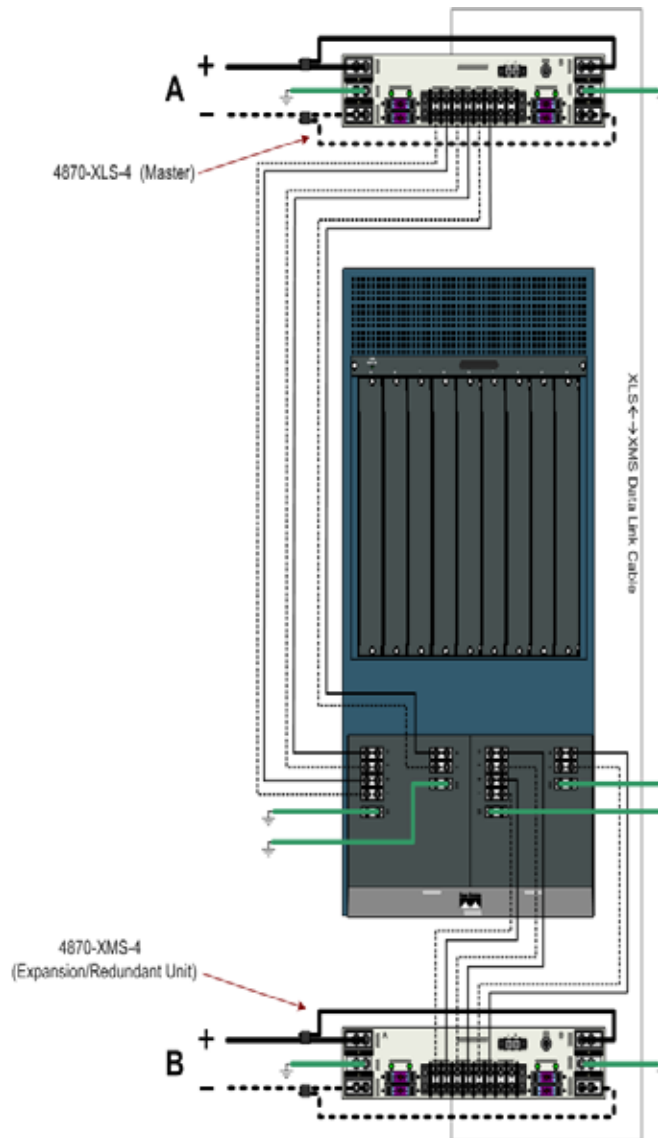
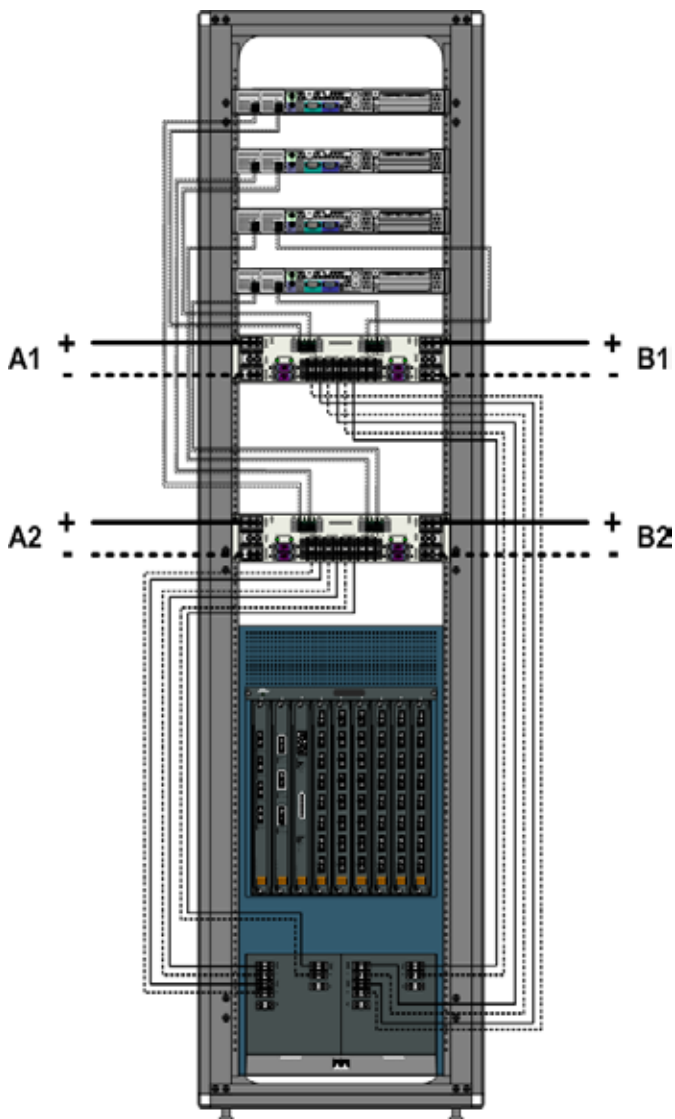
Shown below are qty (2) Sentry 4805/35-XLS-12 units connected to a router as well as several other low current -48 VDC devices. Dual power in-feeds ensure that a loss of either the A in-feed or the B in-feed will still allow the router and other devices to operate on a single supply until the problem is resolved. This provides redundancy and allows for system maintenance without service interruption.

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Sentry : -48 VDC Applications

Shown below are qty (2) Sentry 4870-XLS/XMS units connected to a router with dual power supplies. Each router power supply contains three inputs. Two in-feed sources with an H-Tap provide power to the 4870 units. Point of failure and maintenance concerns are eliminated by wiring one supply to the XLS and one to the XMS allowing removal or replacement of either Sentry unit without interrupting operation of the router.

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If you manage a datacenter,
we have a solution for you.

How do I...

- Distribute -48 VDC power to all the equipment in the cabinet?
- Reboot remote servers and network devices?
- Know when the cabinet temperature is too high?
- Measure power loads in amps at each DC power output block?
- Verify voltage at the DC power outlet circuit?



Sentry : -48 VDC Cabinet Power Distribution Unit Family
with Exclusive Temperature & Humidity Monitoring for Switched CDUs :

Basic -48 VDC CDU

Reliable Cabinet Power Distribution with support for flexible fuse configurations

Switched -48 VDC CDU

Flagship CDU with remote monitoring and management, including reboot commands to connected servers and network equipment and Temperature and Humidity Monitoring

Basic -48 VDC : Key Features

- > Rugged and Reliable Power Distribution
- > Qty (2) 50-200-Amp DC Power Input Feeds (A Feed & B Feed): Supports dual power supply routers and networking gear
- > Multiple DC Outlet Circuits: Protected by GMT or TPA fuses
- > Outlet Circuit Protection: Fast acting fuse with positive visual indication of a blown fuse
- > Variable Amperage and Interchangeable Fuses: Match the fuse value to the amp rating of each outlet circuit
- > Up to (24) output terminal connections
- > 2U 19" chassis fits equipment cabinets or racks
- > Fail-Safe: Model allows either the A or B power infeed to support the load if a power loss occurs on one input
- > NEBS Compliant

Rugged and Reliable

The Sentry Basic -48 VDC Cabinet Power Distribution Unit (CDU) provides fuse protected reliable power distribution to routers, servers and other network devices for mission critical networks. CLECs, ILECs and ISPs use Sentry -48 VDC CDU's to power equipment in remote sites, co-location facilities and network operations centers. Key applications include power distribution for a cabinet with -48 VDC powered servers and high-amp routers.

The Sentry -48 VDC products provide power distribution in a compact 2U 19" rack-mount enclosure.

The exclusive patented power input/grounding assembly has a NEBS compliant dual-stud chassis ground connection, which accepts a dual-hole compression lug. In accordance with NEBS compliance, the compression lug supports a ground wire one size larger than the input cable.

Each power output terminal is protected by a GMT or TPA fuse. There is a wide fuse capacity range available.

Sentry : Additional Features



Fused Power Output Protection



Dual 50-200 Amp DC Power Input Feeds

Sentry : Basic -48 VDC Power Distribution

Reliable Cabinet Power Distribution for -48 VDC Applications

Specifications

Model Number	Inputs	Low Current Outputs	High Current Outputs	Dimensions
PDU400-0-2	Qty (2) 100A (+/- & G), -48 VDC	Qty (16) (.5 to 15A) max outlet protected with GMT fuses*	Qty (8) (5 to 50) max outlet protected with TPA fuses**	17" x 3.5" x 16" (W x H x D)
PDU400-0-3	Qty (2) 200A (+/- & G), -48 VDC	Qty (16) (.5 to 15A) max outlet protected with GMT fuses*	Qty (8) (5 to 50) max outlet protected with TPA fuses**	17" x 3.5" x 16" (W x H x D)
PDU400-F-2 (Fail-Safe)	Qty (2) 100A (+/- & G), -48 VDC	Qty (16) (.5 to 15A) max outlet protected with GMT fuses*	Qty (8) (5 to 50) max outlet protected with TPA fuses**	17" x 3.5" x 16" (W x H x D)
PDU420-0-1	Qty (2) 50A (+/- & G), -48 VDC	Qty (20) (.5 to 15A) max outlet protected with GMT fuses*	None	17" x 3.5" x 16" (W x H x D)

* Available GMT Fuse Values: 3/4, 1, 1 1/2, 2, 3, 4, 5, 7.5, or 10 Amps, fuse values must be specified and ordered at time of order

** Available TPA Fuse Values: 25, 30, 40 or 50 Amps maximum, fuse values must be specified and ordered at time of order

Sentry : Rack-Mount Enclosures



PDU400-0-2



PDU400-F-2 (Fail-Safe)



PDU400-0-3



PDU420-0-1

Switched -48 VDC : Key Features

- > Remote Power Management: Combines intelligent power distribution and remote power control into a single 2U, 19" rack-mount enclosure
- > Qty (2) 100-Amp DC Power Input Feeds (A Feed & B Feed): Supports dual power supply routers and networking gear
- > Multiple DC Outlet Circuits: Protected by GMT or TPC fuses
- > Outlet Circuit Protection: Fast acting fuse with positive visual indication of a blown fuse
- > Variable Amperage and Interchangeable Fuses: Match the fuse value to the amp rating of each outlet circuit
- > IP Access: For Remote Power On, Power Off, or Reboot
- > Communications and Security: 10/100 BaseT Ethernet, HTTP/HTTPS, SSLv3/TLSv1, SNMP, SSHv2, Telnet, LDAPv3, TACACS+, and serial port access
- > SNMP Traps: Automated alerts for power and environmental conditions
- > PSTN: Optional integrated secure global modem.
- > Environmental Monitoring: Two optional Temperature and Humidity probes (not available on 4820 XLS or 4835 XLS)
- > Load Sense: Real time reporting of the current draw, in amps, for each power outlet
- > On Sense: Verify voltage at the DC power outlet circuit
- > Expansion Units: Each Sentry Intelligent -48 VDC XLS links to an XMS -48 VDC unit

Switched -48 VDC Power Distribution

The Sentry Switched -48 VDC Cabinet Power Distribution Unit (CDU) minimizes the impact of locked-up routers , servers and other network devices for mission critical networks. CLECs, ILECs and ISPs use Sentry -48 VDC CDU's to manage equipment in remote sites, co-location facilities and network operations centers. Remote devices that are locked-up can be easily rebooted without the need to send a technician to the site. Key applications include power distribution and remote management for a cabinet with -48 VDC powered servers and high-amp routers.

The Sentry -48 VDC switched products provide power distribution and remote power management in a compact 2U, 19" rack-mount enclosure.

Other features include sequenced power up to avoid current inrush problems, grouping of outputs to ensure that multiple supply devices come up at the same time across A and B power feeds, and linking for cost savings and doubling the number of outputs available on a single IP address.

Each power output terminal is protected by a GMT or TPC fuse or a circuit breaker. There is a wide fuse capacity range available.

Sentry : Additional Features



IP Addressable

Remote Power Management that combines intelligent power distribution and remote power control. IP Access for Remote Power On, Power Off, or Reboot



Temperature & Humidity Monitoring

Supports two external temperature and humidity probes. Each of these probes measure both temperature and humidity. Receive SNMP-based alert notifications when conditions exceed defined thresholds (Not Available on the 4820 or 4835 Models).



HTML GUI Interface

Sentry Switched -48 VDC products can be monitored remotely through the integral GUI Interface.

Sentry : Switched -48 VDC Power Distribution with IP Connectivity

Cabinet Power Distribution Unit (CDU) with Remote Access, Power Cycling and Temperature and Humidity Monitoring

Specifications

Model Number	Inputs	Low Current Outputs	High Current Outputs	Dimensions
4805-XLS-16	Qty (2) 100A (+/- & G), -48 VDC	Qty (16) 10A max outlet protected with GMT fuses*	None	17" x 3.5" x 16" (W x H x D)
4805/35-XLS-12	Qty (2) 100A (+/- & G), -48 VDC	Qty (8) 10A max outlet protected with GMT fuses*	Qty (4) 70A max outlet protected with TPC fuses**	17" x 3.5" x 16" (W x H x D)
4820-XLS-8	Qty (2) 100A (+/- & G), -48 VDC	None	Qty (8) 25A circuit breakers, push-to-reset, pull-to-break circuit***	17" x 3.5" x 16" (W x H x D)
4835-XLS-4	Qty (2) 100A (+/- & G), -48 VDC	None	Qty (4) 40A circuit breakers, push-to-reset, pull-to-break circuit***	17" x 3.5" x 16" (W x H x D)
4870-XLS-4	Qty (2) 100A (+/- & G), -48 VDC	None	Qty (4) 70A max outlet protected with TPC fuses**	17" x 3.5" x 16" (W x H x D)

* Available GMT Fuse Values: ¼, 1, 1½, 2, 3, 5, 7.5, or 10 Amps.

** Available TPC Fuse Values: 25, 30, 40, 50, 60 or 75 Amps maximum.

*** Custom circuit breaker values: 5, 10, 15, 20, 25, 30, 35 or 40 Amp breakers available

All Fuse values must be specified and ordered at time of order

Sentry : Rack-Mount Enclosures



4805-XLS-16



4805/35-XLS-12



4820-XLS-8



4835-XLS-4



4870-XLS-4

Basic -48 VDC Agency Approvals

- > TUV-GS marked to EN 60950
- > cTUVus marked to UL 1950 and CSA C22.2 No. 950-95

NEBS Compliant (For Basic and Switched -48 VDC)

GR-63-CORE

- > Section 4.2
- > Section 5.2

GR-63-CORE

- > Spatial Requirements ---- Section 2.0
- > Thermal Requirements --- Section 4.2.3.2
- > Earthquake/Vibration ----- Section 4.4

GR-1089-CORE

- > Section 3.2
- > Section 7
- > Section 9

GR-1089-CORE

- > Lightning and AC Fault----- Section 4.0

Switched -48 VDC Agency Approvals

For 4820 and 4835 XLS Units

- > TUV-GS marked to EN 60950
- > cTUVus marked to UL 1950 and CSA C22.2 No.950-95

For 4805, 4805/35 and 4870 XLS Units

- > TUV-GS marked to EN 60950-1:2001
- > cTUV-us marked to UL 60950-1:2003 and CSA C22.2 No. 60950-1-3

Communications

- > 10/100 BaseT Ethernet
- > SSLv3/TLSv1
- > SSHv2
- > LDAPv3
- > Serial Port Access
- > HTTP/HTTPS
- > SNMPv2
- > Telnet
- > TACACS+

Accessories and Fuse Part Numbers (For Basic and Switched -48 VDC)

Accessories

- > Integrated Global Secure Modem 56 kbps (for XLS Models)
- > Temperature & Humidity Probe
 - EMTH-1-1 Temperature & Humidity Probe, 10'
 - (not available for 4820 or 4835)
- > HDMB-2 -- 23" Mounting Brackets

Fuse Part Numbers

GMT	TPA	TPC
FUSE-GMT-3/4A	FUSE-TPA-10	FUSE-TPC-10
FUSE-GMT-1.0A	FUSE-TPA-15	FUSE-TPC-15
FUSE-GMT-1.5A	FUSE-TPA-20	FUSE-TPC-20
FUSE-GMT-2A	FUSE-TPA-25	FUSE-TPC-25
FUSE-GMT-3A	FUSE-TPA-30	FUSE-TPC-30
FUSE-GMT-5A	FUSE-TPA-40	FUSE-TPC-40
FUSE-GMT-7.5A	FUSE-TPA-50	FUSE-TPC-50
FUSE-GMT-10A		FUSE-TPC-60
FUSE-GMT-15A		FUSE-TPC-75



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