

# Sentry Switched Fail-Safe Transfer Switch

## CW-16HF2 208-240V Power Distribution, Outlet Control and Redundancy for Single-Power Supply Servers

### Key Features

- > **Fail-Safe:** Redundant power feeds pick up the entire load for both circuits if either power feed fails
- > **Power Distribution:** 208V 20/30A; 230V 16/32A power input options (Phase-synchronized input power required).
- > **Remote Management:** Power cycle individual power outlets, or groups of power outlets, to remotely reboot servers and network devices, anywhere in the world. Or, power-off unused power receptacles
- > **Power-up Sequencing:** of outlets prevents a power in-rush overload. User adjustable sequence interval.
- > **Input Current Monitor:** Power monitoring of the aggregate load (in amps) on each power circuit via the network interface and locally on the enclosure.
- > **Authentication:** Username/password required for network administrators & user accounts. Multiple user accounts can be established with designated access rights.
- > **Web GUI:** Full configuration & control for managing and grouping outlets, user accounts and network settings
- > **Add an Expansion Module:** Connect the Switched Expansion Module (CX) to a Master unit (CW) for power monitoring and control from a single IP address.
- > **Outlet Grouping:** Group individual outlets for control of dual-power supply servers and devices with a single command.
- > **Environmental Monitoring:** Add temperature, humidity, water and intrusion monitoring with the EMCU-1-B



### Switched Fail-Safe Transfer Switch

The Sentry CW-16HF2 provides fail-over redundancy to single or dual-power supply servers and network devices. Exclusive to the Sentry Switched Fail-Safe family is its ability to carry loads on the A circuit, B circuit or both and to remotely manage the outlets.

Similar, but unlike a common automatic transfer switch, the Sentry Switched Fail-Safe unit is unique in that it contains two (2) in-feeds with two (2) banks of eight (8) outlets each, for a total of 16 outlets across the two circuits.

The "A" infeed routinely powers just the A1-8 outlets, and the "B" in-feed routinely powers just the B1-8 outlets. However, if the "A" infeed goes down, the "B" infeed powers all 16 outlets and if the "B" infeed goes down, the "A" infeed powers all the outlets.

This "Fail-Safe" method has several advantages compared to a standard ATS because it does not prohibit load balancing between the two supplied circuits. A standard ATS contains two in-feeds, but runs all outlets from just one source, with the secondary source only being used once an outage occurs on the primary infeed. The "Fail-Safe" method differs in that both circuits are routinely loaded, but only to half capacity. This results in less heat and consequently less of a voltage drop compared to the same load existing on just one source. Only when an outage occurs on one of the two sources will the entire load be applied to a single source.



### Input Current Monitoring

Exclusive Digital True RMS current monitoring is critical to preventing overloads in high-density computing environments. LED digital display on the CDU enclosure report the input current of the branch circuit.



### Temperature and Humidity

The Switched CDU supports two external probes. Each of these probes measure both temperature and humidity. Receive SNMP-based alert notifications when conditions exceed defined thresholds.



### Linking (Expansion Modules)

The Switched CDU family has the capability to daisy chain units together. The Expansion Module provides the ability to link two power circuits under one IP address.

Model	Available Input Voltages	Amperage	Available Input Cord	Outlets	Dimensions (L x W x D)
CW-16HF2A452 CX-16HF2A452*	208-240V 50/60 Hz	20A	(2) IEC C20 Power Inlets	(16) IEC 60320/C13	17.2 x 3.50 x 10.0 in. (437 x 89 x 254 mm)
CW-16HF2C452 CX-16HF2C452*	208-240V 50/60 Hz	30A	(2) NEMA L6-30P Plugs, 10'(3m) Cord	(16) IEC 60320/C13	17.2 x 3.50 x 10.0 in. (437 x 89 x 254 mm)
CW-16HFEA452 CX-16HFEA452*	230V 50/60 Hz	16A	(2) IEC C20 Power Inlets	(16) IEC 60320/C13	17.2 x 3.50 x 10.0 in. (437 x 89 x 254 mm)
CW-16HFEK452 CX-16HFEK452*	230V 50/60 Hz	32A	(2) IEC Blue 2P+G Plug, 10'(3m) Cord	(16) IEC 60320/C13	17.2 x 3.50 x 10.0 in. (437 x 89 x 254 mm)

\*CX part number refers to the expansion CDU

## Additional Features and Specifications

### Agency Approvals

- > US & Canada (cTUVus Mark) to UL 60950-1:2007 and CAN/CSA 22.2 No. 60950-1-07
- > European Union (TUVGS Mark) to EN 60950-1: 2006 + A11
- > CE
- > FCC Class A, Part 15
- > EMC to EN 55022 Class A, EN 55024, CISPR 22 Class A

### Communications and Security

- > 10/100 BaseT Ethernet
- > HTTP/HTTPS
- > SSLv3/TLSv1
- > SNMPv2
- > SSHv2
- > Telnet
- > LDAPS/LDAPv3
- > TACACS+
- > RADIUS
- > RS-232 (Serial)

### Branch Circuit Protection

- > Compliant to UL 60950-1

### Warranty

- > 2 years

### Power Cord Options

- > PTCORD-1 IEC 60320/C19 - NEMA L6-20P (20A Twist-Lock) 10' (3m)
- > PTCORD-2 IEC 60320/C19 - Schuko 10' (3m)
- > PTCORD-3 IEC 60320/C19 - IEC 60309 (BS4343, CEE17) 16/20A Blue (UK Commando) 10' (3m)
- > PTCORD-4 IEC 60320/C19 - BS1363 13A (UK) 10'(3m)

### Accessories

- > Optional Temperature & Humidity Probe
  - EMTH-1-1 Temperature & Humidity Probe, 10ft (3m)
- > Environmental Monitor
  - EMCU-1-1B allows up to (2) temperature & humidity probes, (1) water sensor, (4) dry contact closures, (1) analog-to-digital contact sensor. Includes (1) temperature/humidity probe with unit.
- > SPM (Sentry Power Manager):
  - Monitor and Manage multiple Sentry CDU's
  - Monitor and Manage all alarm conditions
  - Reporting and Trending
  - Group or Cluster outlets for reboot and power information
  - Optional Appliance or virtual version
  - SPM v5.1+ is VMware READY



VMware and VMware Ready is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions



Rear View: Circuit Breakers, Network, serial, linking, and environmental inputs



### Expansion Unit Model Numbers

- > CX-16HF2A452
- > CX-16HF2C452
- > CX-16HFEA452
- > CX-16HFEK452



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