

Server Technology's PR04X Switched POPS PDUs run on our state-of-the-art Xerus network interface platform and provide remote access to power, PDU status, input, outlet and branch current monitoring, and outlet on/off control. The PDU features RamLock, a self-locking mechanism to prevent accidental cord disconnects, and our award-winning HD0T Cx outlets that can be deployed as either a C13 or C19. Switched POPS PDUs are secured with strong configurable password, active directory, 256-bit AES encryption, SSH, SSL and HTTPS support. SNMP traps provide automated alerts on power and environmental conditions from Legrand's plug-and-play environmental monitoring sensors like temperature, humidity, water, dry contact closure, airflow, air pressure differential, and more.

# **Key Features**



#### **HDOT Cx Outlets**

Cx is the future-ready UL tested hybrid of a C13 and C19 outlet accommodating both C14 and C20 plugs.



## **Network Monitoring**

Gain access to valuable data through connections including HTTP(S), SSH, Telnet, SNMP, (S)FTP, SMTP, Syslog, LDAP(S), RS-232 serial, and more.



#### Multi-Color LCD

An easy-to-read LCD provides a local indication of power usage, alerts, and alarms.



#### **Power Quality Measurements**

Monitor and alert on the power being fed to the PDU for harmonics, voltage dips and swells, crest factor, and more at the outlet or load.



#### **Waveform Capture**

Capture voltage and current waveforms automatically or upon demand.



## **Environmental Monitoring**

Support up to 12 daisy chained DX2-series SmartSensors, each with the ability to send SNMP-based alerts and email notifications.



#### Per-Outlet Power Sensing

POPS® (Per Outlet Power Sensing) Monitors Current Load (A), Voltage (V), Power (W), Apparent Power (VA), Crest Factor, Power Factor, and Energy per outlet.



## Outlet Control

On Switched PDUs, cycle power to individual outlets or groups of outlets to reboot servers, or power off unused receptacles.



## High Temperature Rating

This product has been tested and approved for safe and reliable operation in 60  $^{\circ}\text{C}$  data center environments.



### Color-Coded Options

Select from six colors to designate PDU circuits in the data center — black, white, red, green, blue, and yellow.



#### **45 Degree Angled Infeed**

The angled infeed improves accessibility, provides infeed strain relief, and its bend radius is suitable with 60A rated cords.



#### Multi-Unit Linking & Cascading

Daisy chain up to 16 PDUs from a primary PDU using a USB or Ethernet connection through a single IP address.



#### Hot Swappable Controller

The Controller is the PDU's center of intelligence and houses computing, display, and connectivity ports.



## **RGB LED Outlet Indicators**

RGB LEDs identify an outlet's on/off state, if it's above/below a certain power threshold, or if it's in suspect of a power measurement irregularity.



### RamLock Locking Outlets

A mechanical locking mechanism built to secure the broadest range of C14 and C20 plugs in place.



## Per-Inlet Power Sensing

PIPS® (Per Inlet Power Sensing) Monitors Current Load (A), Voltage (V), Power (W), Apparent Power (VA), Crest Factor, Power Factor, & Energy per inlet.



#### **Branch Circuit Protection**

This PDU meets the UL and IEC 62368-1 requirement for branch circuit protection through UL 489 rated magnetic-hydraulic circuit breakers or UL 248 fuses.



# Alternating-Phase Outlets

Evenly distributes multiple phases of power to each outlet for simplified load balancing, reduced cord lengths, and better airflow.



#### Flexible Mounting

Includes standard button mounts along with provisions for custom mounting brackets.

# Inputs

| Input Voltage (V):                                  | 208                    |  |
|---|------------------------|--|
| Frequency   | 50/60 Hz               |  |
| Input Plug:   | IEC C20 100-240V Inlet |  |
| Input Current (A):                                  | 20                     |  |
| Input Current Rated (A):                            | 16                     |  |
| Input Power Capacity (kW):                          | 3.3                    |  |
| Requires PTCORD-L1, -L2, -L3, -L4, -L5, -L6, or -L7 |                        |  |

# **Outputs**

| Connector            | Rating  |
|----------------------|---|
| (24) x IEC 60320/C13 | North American Rating: < 12A @208V L-L (15A Peak) Global Rating: < 10A @230V L-N    |
| [24] x Cx            | North American Rating: ≤ 16A @208V L-L (20A Peak)<br>Global Rating: ≤ 16A @230V L-N |

The Cx outlet has superior cable retention. Moderate force is required when plugging in a C14 or C20 connector to fully seat the plug and to ensure proper installation. An incorrectly installed plug will be loose and will not provide a reliable connection.

Outlet #1 opposite the power input

# **PDU Configuration Details**

## Examples:

C4W36RA-0ABE2FE2/00 00 - PDU with C20 inlet, black paint, and overlays

C4W36RA-YCBE2EE3/30 B1 - PDU with standard 3 m input cord, black paint, blue markings

| Input Cord Length or Other       |    |    |
|----------------------------------|----|----|
| C20 Inlet, Input Terminal Block  | 00 |    |
| 1m/3.3ft                         | 10 |    |
| 1.5m/4.9ft                       | 15 |    |
| 2m/6.6ft                         | 20 |    |
| 2.5m/8.2ft                       | 25 |    |
| 3m/9.8ft (standard)              | 30 |    |
| 3.5m/11.5ft                      | 35 |    |
| 4m/13.1ft                        | 40 |    |
| 4.5m/14.8ft                      | 45 |    |
| 5m/16.4ft*                       | 50 |    |
| PDU Paint Color / Overlay Colors |    |    |
| Black Paint, Black Labels        |    | 00 |
| Black Paint, Red Labels          |    | R1 |
| Black Paint, Blue Labels         |    | B1 |
| Black Paint, Green Labels        |    | G1 |
| Black Paint, Orange Labels       |    | N1 |
| Black Paint, Yellow Labels       |    | Y1 |
| Black Paint, White Labels        |    | W1 |

Note: \* Not available in North America

# **Branch Circuit Protection**

 $UL~489, CSA~C22.2~No.~5~\&~IEC/EN~60947-2~Compliant~2-pole, 20A~trip~circuit~breakers, three~(3)~branch, rating: \\ \leqslant 16A, 10~kAIC~Interrupt~Rating$ 

# **Physical**

Dimensions: 80.0in tall x 2.2in wide x 2.5in deep [2032mm x 56mm x 64mm]

## **Environmental**

**Operating Environment:**  $32^{\circ}$ F to  $140^{\circ}$ F /  $0^{\circ}$ C to  $60^{\circ}$ C | 5% RH to 90% RH non-condensing | < 3000M / 10,000 ft. elevation **Storage Environment:**  $-40^{\circ}$ F to  $185^{\circ}$ F /  $-40^{\circ}$ C to  $85^{\circ}$ C | 20% RH to 90% RH non-condensing | < 15,000M / 50,000 ft. elevation Quiescent / Unloaded Power Draw: < 7W for all configurations

# Communications & Security

Dual Ethernet, Two (2) 10/100/1000 Mbps (Cat5e/6 connector), Optional Wi-Fi (802.11 a/b/g/n) One (1) Sensor port (RJ45), One (1) PDU Link (RJ45),

Two (2) USB-A (5 V / 500 mA), and One (1) USB-B

Web-browser GUI and command-line interface (CLI): HTTP/HTTPS, TLSv1.2, SSHv2, Telnet, SNMPv2c and v3 (GET, SET, Traps), IPv4 and IPv6, LDAPv3/LDAPS, TACACS+, RADIUS, FTP/SFTP

## Certifications

## North American:

Safety (Listed & Certified, cTUVus mark)

UL 62368-1

CSA C22.2 No. 62368-1

**FMC** 

FCC Part 15 Subpart B Sections 15.107 & 15.109, Class A

CANICES-003, Class A

## Global:

Safety

EN IEC 62368-1 (TUVR certified, T-mark)

IEC 62368-1 incl. regional, national and harmonized differences (IECEE CB scheme) EMC

EMC

EN 55032 / CISPR 32

EN 55035 / CISPR 35

EN 61000-3-2 / IEC 61000-3-2

EN 61000-3-3 / IEC 61000-3-3

CE Mark

2011/65/EU (RoHS Directive)

2014/35/EU (Low Voltage Directive)

2014/30/EU (EMC Directive)

**UKCA Mark** 

RoHS

Electrical Equipment (Safety)

Electro magnetic Compatibility

# Measurement Accuracy

# Input Measurement Accuracy:

LCD Current =  $\pm$  0.2% at 0.01 amp resolution

GUI Current = ± 0.2% at 0.01 amp resolution

Voltage = ± 0.2% at 0.1 volt resolution

Neutral Voltage = ± 1% at 0.1 volt resolution

Neutral Current = ± 0.5% at 1% FS resolution (FS is PDU ampere rating)

Active Power =  $\pm$  0.5% at 1 watt resolution

Apparent Power =  $\pm 0.5\%$  at 1 volt-amp resolution

Reactive Power = ± 1% at 1 volt-amp reactive resolution

Power Factor = ± 1% at 0.01 resolution

Crest Factor = ± 1% at 0.1 resolution

Active Energy =  $\pm$  0.5% at 0.1 kilowatt-hour resolution

Apparent Energy =  $\pm$  0.5% at 0.1 kilo volt ampere hour resolution

Reactive Energy = ± 1.0% at 0.1 kilo volt ampere reactive hour resolution

Voltage Total Harmonic Distortion = 1.0%

Current Total Harmonic Distortion = 5.0%

## **Output Measurement Accuracy:**

LCD Current = ± 0.2% at 0.01 amp resolution

GUI Current = ± 0.2% at 0.01 amp resolution

Voltage =  $\pm$  0.2% at 0.1 volt resolution

Active Power =  $\pm$  0.5% at 1 watt resolution

Apparent Power =  $\pm$  0.5% at 1 volt-amp resolution

Reactive Power = ± 1% at 1 volt-amp reactive resolution

Power Factor =  $\pm$  1% at 0.01 resolution

Crest Factor =  $\pm$  1% at 0.1 resolution Active Energy =  $\pm$  0.5% at 0.1 kilowatt-hour resolution Reactive Energy =  $\pm$  1.0% at 0.1 kilo volt ampere reactive hour resolution Voltage Total Harmonic Distortion = 1.0% Current Total Harmonic Distortion = 5.0%

#### **Branch Measurement Accuracy:**

Current = ± 1% at 0.01 amp resolution

# **Optional Accessories**

PDU Linking/Cascading uses standard RJ45 cables.

Button Mounts (KIT-0020) are included with vertical PDUs for tool-less mounting (see diagram).

Horizontal PDUs will include a set of RU mounting brackets. See the Mounting Bracket Guide for further suggestions.

## USB Dongle Accessories\*:

WI-FI Access (DX2-WIFI-USB)

KVM and Serial Access (DSER-PWR-USB-G4, DKX3-PWR-USB-G4, DSER-CLI-USB-G4)

#### Legrand SmartSensors\*:

Temperature (DX2-T1)

Temperature and Humidity (DX2-T1H1, DX2-T2H2, DX2-T3H1)

Temperature and Differential Air Pressure (DX2-T1DP1)

Airflow (DX2-AF1)

Dust/Particles (DX2-PS)

Water/Leak Floor (DX2-WSF-35-KIT, DX2-WSF-70-KIT, DX2-WSF-100-KIT)

Water/Leak Rope (DX2-WSC-35-KIT, DX2-WSC-70-KIT, DX2-WSC-100-KIT)

Dry Contact (DX2-D2)

Dry Contact/Contact Closure (DX2-D2C6)

Powered Dry Contact (DX2-PD2)

Powered Dry Contact/Contact Closure (DX2-PD2C5)

Contact Closure (DX2-CC2)

Proximity/Motion and Tamper (DX2-PIR)

Vibration (DX2-VBR)

Sensor Hub (DX2-ENVHUB4)

## Legrand SmartLock\*:

Intelligent Door Sensor (DX2-DH2C2)

Supports multiple low- and high-frequency door handles.

## Legrand Asset Management\*:

Asset Management Sensor Strip for 42U rack (AMS2-42)

Asset Management Sensor Strip for 45U rack (AMS2-45)

Asset Management Sensor Strip for 48U rack (AMS2-48)

Asset Management Sensor Strip for 54U rack (AMS2-54)

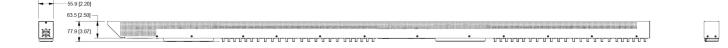
\*Connecting certain accessories may require a firmware update. Accessories are sold separately.

# **Drawings**

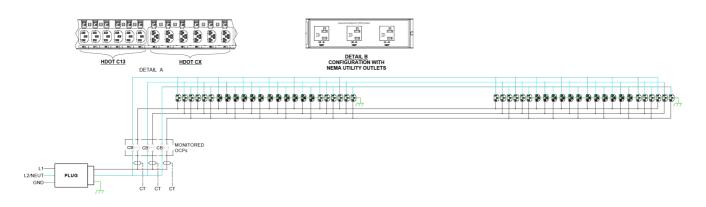
#### NOTES

- DIMENSIONS ARE IN MILLIMETERS AND
   BRACKETS ARE IN INCHES.
- DIMENSIONS ARE NOMINAL. INFORMATION SUBJECT TO CHANGE WITHOUT NOTICE.









# Additional Information

**Warranty:** Server Technology offers a standard 2-year limited parts & labor warranty. Extended support is available at the time of purchase. See the Support Options on the website, or contact your local Server Technology representative for more information.

Patents: Information on Server Technology patents is available on the website at: www.servertech.com/products/patents

"Global" models are typically for use in countries outside of North America. Contact your Server Technology representative for more information about which models are appropriate for your application.

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