

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 HDOT 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.  $% \label{eq:capture} % \label{eq:capture}$ 



### **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):	415
Frequency	50/60 Hz
Input Plug:	230/400 32A & 240/415V Wye 30A IEC 60309 3P+N+G 6Hr
Input Current (A):	30
Input Current Rated (A):	24
Input Power Capacity (kW):	17.3

# **Outputs**

Connector	Rating
(24) x IEC 60320/C13	North American Rating: ≤ 12A @208V L-N (15A Peak) Global Rating: ≤ 10A @230V L-N
(24) x Cx	North American Rating: < 16A @208V L-N (20A Peak) 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, six (6) branch, rating: ≤ 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 = ± 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**

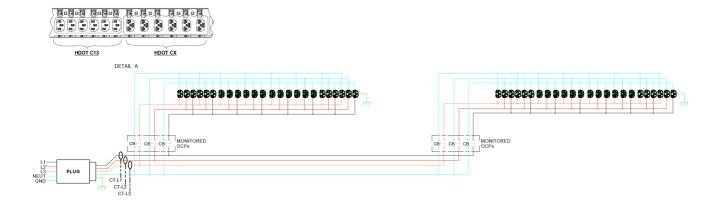
#### NOTES

- 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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