

# Cyberex® Power Distribution Unit (PDU)

## Power distribution system

Data centers are the essential ingredients that enable individual businesses to have an electronic presence on the Internet. Reliable uninterrupted power is critical to the mission of any organization's data center.

At Cyberex we have embraced the challenge to develop solutions to meet individual needs of the modern data center while maintaining our heritage of offering the highest reliability on the market today.

The Cyberex PDU offers the most reliable and flexible power distribution product on the market today with almost unlimited configurations of panelboards, sub-feed breakers to meet every load requirement. Three cabinet designs support ratings up to 500kVA.

Our circuit management of products provides solutions to monitor and manage any combination of individual branch circuits or sub-feeds from a single hardware platform.

The flexibility of the Cyberex PDU benefits the system designer, the installer and the owner. If one of our countless standard configurations doesn't meet your application's needs Cyberex is a master at customization. Our engineering staff stands ready to create just what you need.

## Designed for performance and flexibility

### Product features

- Multiple panelboard and breaker configurations offer the highest level of customization for diverse loads
- Comprehensive system monitoring provides ultimate flexibility for collecting and managing power data
- Optional safety barrier to separate primary and secondary voltages
- Branch circuit and sub-feed management (optional) provides enhanced power data collection for branch circuits and sub-feeds
- Remote monitoring interfaces to building management system using Modbus, web server, and SNMP traps
- PDU with 320 x 240 high resolution display capable of monitoring and storing data from up to 16 local or remote circuit management devices – each with up to 168 circuits
- Efficient high isolation, copper wound transformers increases performance and significantly reduce EMI and RFI noise
- Spacious cable management and landing area simplifies frequent wiring changes and ease of installation
- Easy maintenance access ensures safe and trouble-free repair in minimum time
- Compact footprint maximizes valuable floor space
- ETL listed to both UL 60950 and UL 891. Suitable for Installation inside or outside IT-Designated spaces
- Optional seismic rated floor stands available



## PDU product specifications

### Electrical

kVA	50–500kVA
Input	3-phase, 3-wire + ground
Input voltage	Up to 600V – 60Hz*
Output	3-phase, 4-wire + ground
Output voltage	208/120 VAC*
Transformer ratings	K-4, K-13, K-20
Transformer	Standard and TP-1, copper, delta-wye, electrostatic shielding
Transformer temperature rise	115°C (std.) – 150°C available
Transformer inrush	Normal (11X) and low (5X)
Transformer compensation taps	(4) 2-1/2% FCBN, (2) 2-1/2% FCAN
Transformer insulation	220°C (class R)
Neutral rating	200%

### Operating conditions

Temperature (operating)	0 to 40°C
Temperature (storage)	-40 to 60°C
Audible noise	Maximum: 50 dBA (up to 150kVA) 55 dBA (151 to 300kVA) 60 dBA (301 to 500kVA)

### Dimensions

PDU 50–225kVA and most 300kVA			
Height 77.4"	Depth 34"	Width 34"	
PDU 300kVA dependent on transformer option			
Height 77.4"	Depth 34"	Width 46"	
PDU 350–500kVA			
Height 78"	Depth 38"	Width 52"	
Sidecars available in 3 widths			
	10" side-facing		
	24" front and/or rear facing		
	34" front and/or rear facing		

### Distribution options

Side car is needed for more than 2 panelboards
I-line panel available
Standard or 400A panelboards available
Sub-feed breakers available: 100/150/225/400A
ABB or Square D

### General

Natural convection cooled
Hinged dead-front panel
320 x 240 LCD display
Single point ground
Top and bottom entry/exit

### Enhanced options

Branch and sub-feed circuit monitoring
Remote emergency power off (EPO)
Surge protective device (SPD) – primary and secondary sides
Floor stands
Input junction box
Isolated ground

### Standards

NEMA
ETL listed to UL 60950 and UL 891; cETLus to UL1CSA 60950
FCC compliant (part 15)

\*Other configurations available as non-standard

For more information please contact:

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# Circuit management

Designed for performance, flexibility and usability

Take your RPP to the next level by managing your critical loads at the individual branch circuit level. Rely on Cyberex's circuit management solutions to monitor and alert your staff of potential problems before they occur. Understanding load profiles is the key to proactively managing your data center distribution system and avoiding unnecessary downtime.



- Branch circuit management – Up to four (4) 42 circuit panelboards (168 poles)
- Sub-feed circuit management – Up to thirty two (32), 3-wire or twenty four (24), 4-wire sub-feed breakers
- Main-feed circuit management – Up to four (4) sources in multi-fed RPPs can be monitored: phases, neutral and ground

### Advanced communication

- Communicate valuable system data to building management systems (BMS) or local display
- Protocols available: Modbus RTU, Modbus TCP, BACnet to Modbus converter, SNMP trap alarm, web server

### Monitor system parameters including:

- Voltage-current (RMS)
- MIN current
- MAX current
- kW (power)
- kVA-load
- Power factor (PF)
- Total harmonic distribution (THD)

### Configure system warnings and alarms including:

- Over/under current
- Over/under voltage
- Over kW
- Over THD
- Low PF
- Phase loss