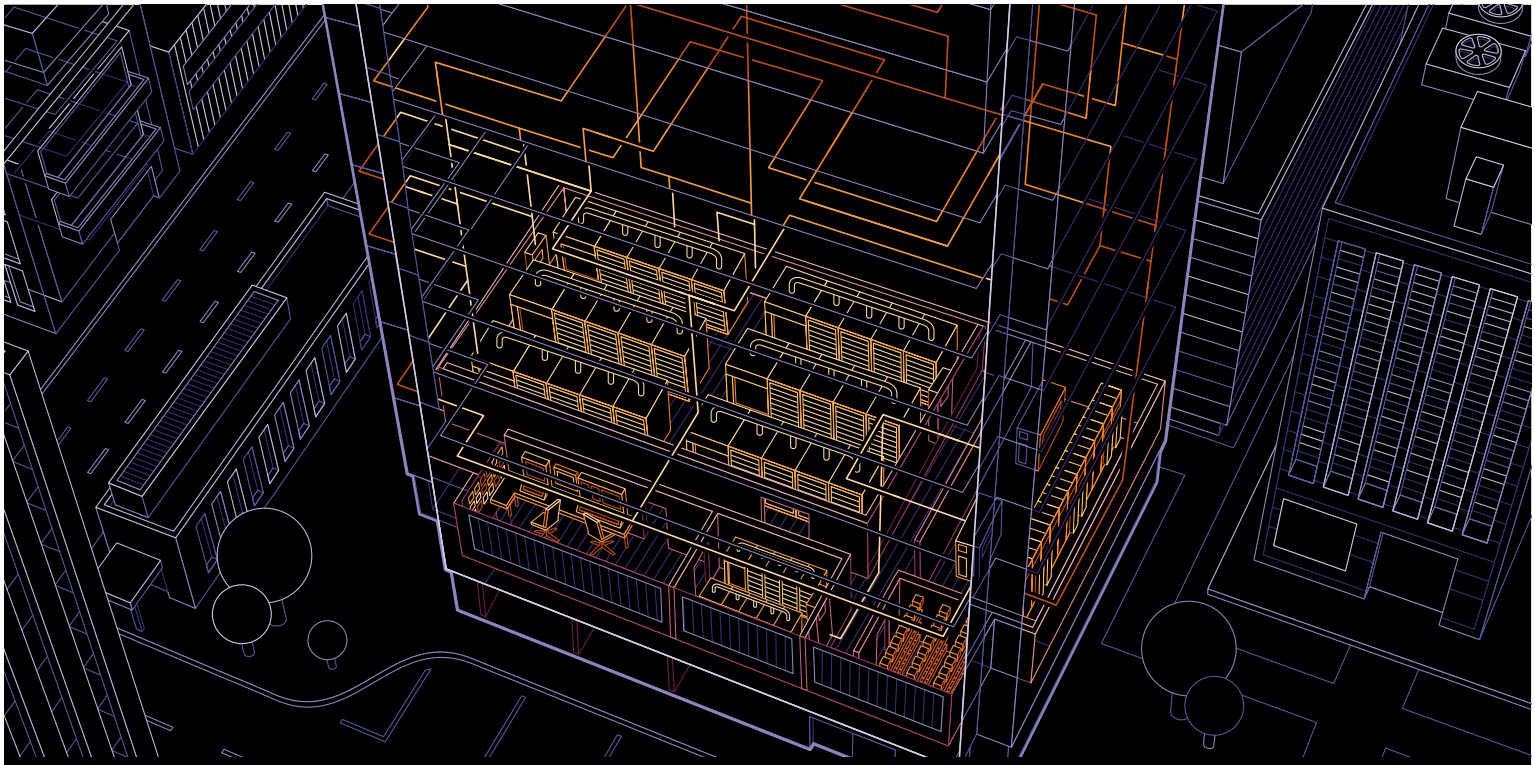


Product brochure

Cyberex® Circuit Management
A flexible solution for data center power monitoring

Power and productivity
for a better world™

ABB

Circuit management

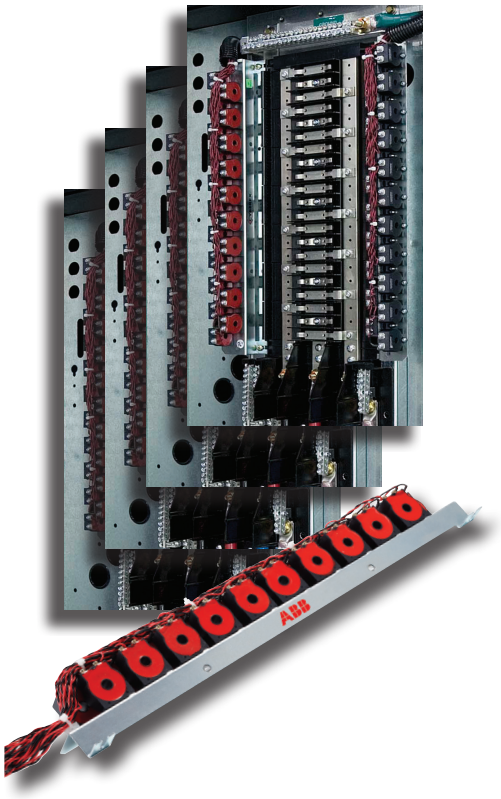
How close are you to tripping a breaker?

Managing individual circuit loading is critical to the reliability of your data center. The Circuit Management system provides accurate load management information and alerts you of potential problems before they affect your operation. User configurable set points allow you to know when each circuit is approaching a load threshold that could interrupt power to that device. This notification allows your staff to proactively maintain your critical operation.

- Branch circuit management (BCM)
- Sub-feed circuit management (SFCM)
- Main-feed circuit management (MFCM)
- Numerous configurations to meet your needs
- Modbus RTU and TCP/IP
- Web server
- SNMP trap monitoring

Designed for performance, flexibility and reliability

- Factory integrated as an optional feature to your PDU or RPP; the Circuit Management system can be used for communicating valuable information to your central management system or to a local or remote display panel.
- The Circuit Management system actively monitors the load current of each of your circuits and reports this information to you for cost allocation or load protection management.
- The Circuit Management system can be field maintained or upgraded to allow the addition or replacement of individual sensors. Others offer only a fixed component system carried on a PCB that must be abandoned within your panels and bypassed with an inelegant hardware configuration when upgraded or repaired.
- Field retrofittable to existing Cyberex PDU/RPP via Cyberex BCMR kit.



Meter up to 4 panelboards per module

Designed for performance, flexibility and usability

Innovation in design

- Robust connections of circuit sensors via wiring harness connection
- Optional snap and screw-on circuit sensors with integral protection resistor
- Enclosed electronics module

Best in class serviceability

- Easily replace individual screw-on circuit sensors in the field, means only one circuit is effected, not the entire panel
- Only power down individual branch, not entire panel
- Minimize costs and downtime

Ease of configuration

- User-friendly, intuitive graphical user interface
- Flexible configuration – by individual circuit or entire panelboard

Advanced connectivity

- Single system monitors up to 168 branch circuits – can be panelboards or a combination of panelboards and subfeeds
- Monitor up to 2,688 circuits with one local display
- Both 2 and 4 wire modbus compatible
- Integrates with your building management system

Panelboard compatibility

- Fits most panels: ABB, Square D, GE, Eaton/Cutler Hammer, standard and column width

Circuit Management

A flexible solution for your unique data center load profile

Flexible configurations

A single circuit management module can be configured to gather current, voltage, power and energy data in the following distribution devices:

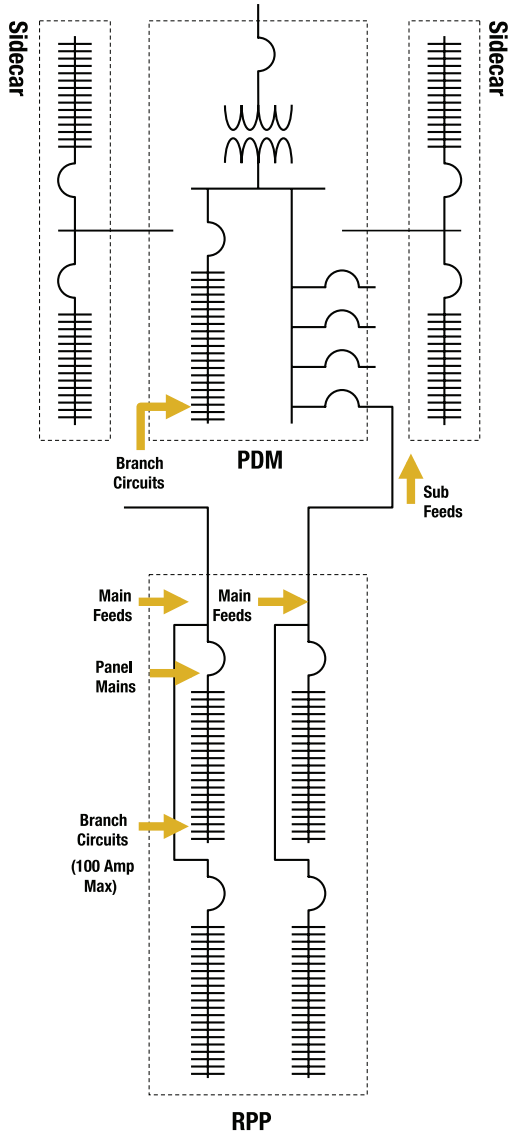
– Transformer controls & monitoring (TCM) – transformer voltage, current, and temperature monitoring

– Branch circuit management (BCM) – Up to four (4), 42 circuit panel boards (168 poles)

– Sub-feed circuit management (SFCM) – Up to thirty two (32), 3-wire or twenty four (24), 4-wire sub-feed breakers

– Combination circuit management – Panelboard branch breakers and sub-feed breakers can be combined in a single configuration

– Main-feed circuit management (MFCM) – Up to four (4) sources in multi-fed RPPs can be monitored phases, neutral & ground



Ethernet Gateway

A single local display can concentrate data from 16 Cyberex circuit management systems and send it to remote monitoring systems via modbus TCP or the web server. Connects to your building management system or a standard web browser.

Web server and SNMP

Web accessibility

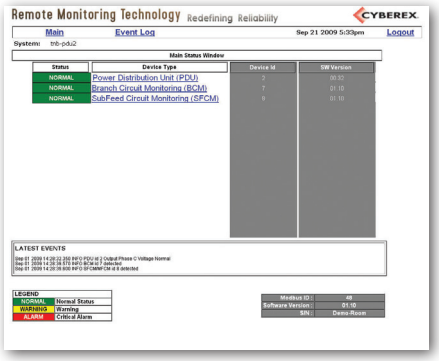
Our optional web server provides you the ability to remotely access your circuit management data from any computer using an ordinary web browser and an Internet connection. The BCM's optional remote display device comes with web server capability. A single display and web server can collect data from thousands of branch circuits and sub-feed circuits in interconnect RPPs and PDUs.

SNMP trap monitoring (PDU and RPP products)

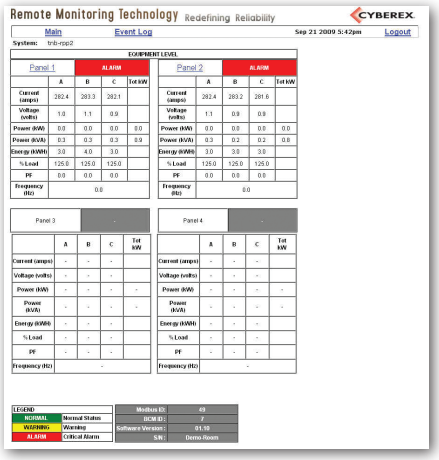
The web server also broadcasts a SNMP traps to alert users of summary alarm conditions as they occur. This trap can be intercepted by your existing BMS system and annunciated along with all other facility-wide alarms and warnings.

Web server features

- Provides instant snapshot of current or power levels on any circuit in your data center from a remote location.
- Provides web page access to a maximum of 16 Cyberex circuit management devices interconnected via Modbus and/or Ethernet.
- Allows up to 2,688 individual circuits to be monitored remotely on the web for current, voltage*, power*, energy*, alarm status and set-point configuration. (*requires energy option)
- Provides SNMP summary alarm traps for use with the customer's monitoring system.
- When integrated with your building management system the circuit data can be used to create a load profile over time to help you better plan capacity.
- Secure, multi-level password-protected environment.



PDU Main

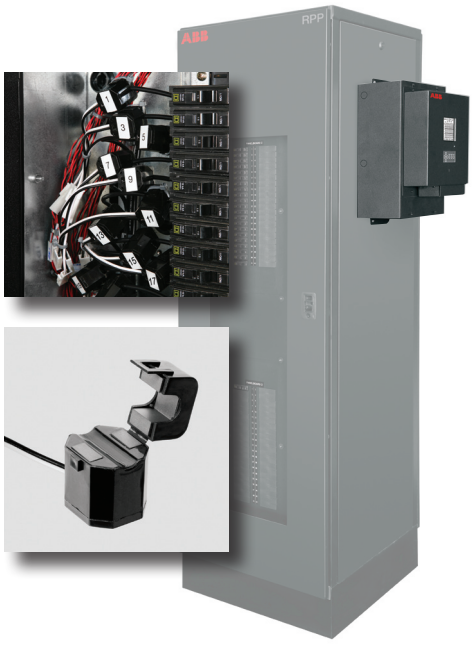


BCM Panel Overview

BCM Panel Individual

Retrofit

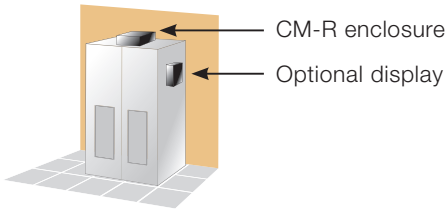
Existing panelboards? No problem!

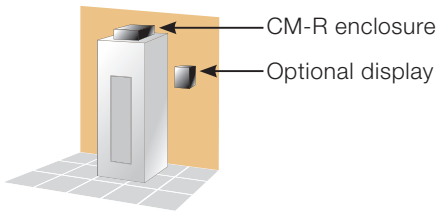


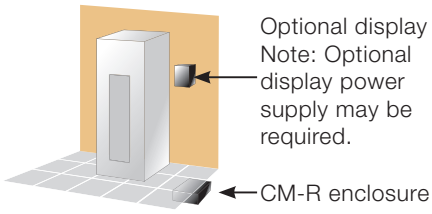
Circuit management – retrofit solutions

Cyberex offers a complete circuit management retrofit solution available to any PDU, RPP, or other panelboard or subfeed application. Our field service team can assess your facility's exact needs and configure a solution that provides Circuit Management capability equal in performance to our factory integrated system without breakers requiring removal. Because of the diversity in today's facilities, Cyberex circuit management retrofit products were designed to offer a broad range of mounting options without the use of drilling or intrusions into your existing equipment beyond the introduction of split core current transformers (CTs). The split core CTs are clamped onto existing branch circuits without interruption to your critical loads.

Circuit management retrofit enclosures can be separated to meet a variety of installation situations.





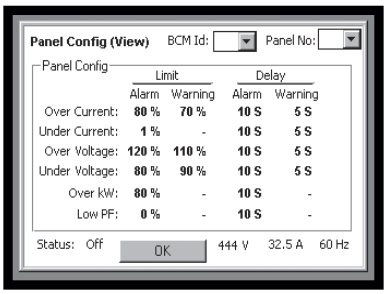


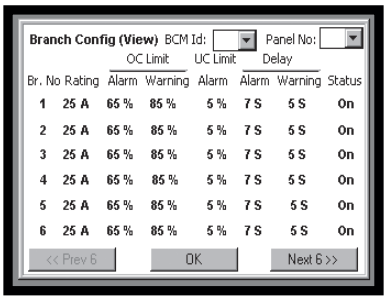
Enclosure mounting options include equipment side mount, equipment top, wallmount and in-floor mount. Display enclosure can be mounted directly on Circuit Management enclosure, side of equipment, or wall.

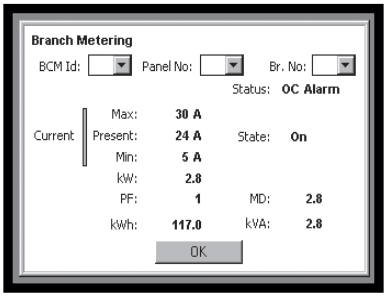
Local Display
– Available standard on PDU
– Optional on RPP

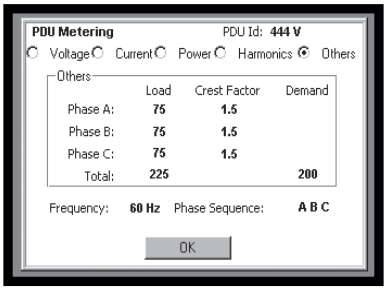
System features

– Monitors panel branch circuit or subfeed current
– User configurable pre-alarm and alarm set points
– Field replaceable individual current transformers
– Electronics modules can be networked to monitor up to 2,688 circuits
– Factory installed option or retrofit to PDU or RPP
– Energy metering – including voltage sensing, KW and kVA (optional)









Product specifications

Electrical	
Circuits	42–168 per system
Voltage	Up to 480/277V
Frequency	50/60 Hz
Branch current rating	60A or 100A
Accuracy	+/- 2%
Max. branch conductor (60A)	#6 THHN (6.4mm OD)
Max. branch conductor (100A)	#4 THHN (8.4mm OD)
Configurable alarms Include	
Overcurrent warning	
Overcurrent alarm	
Undercurrent alarm	
Current warning delay time	
Current alarm delay time	
Overvoltage warning	
Overvoltage alarm	
Overvoltage warning delay time	
Overvoltage alarm delay time	
Over kW alarm	
Communications	
Protocol	Modbus RTU (RS-485); Modbus TCP/IP
Web server	Works with standard web browsers
SNMP	Alarm summary trap monitoring
Polling intervals	
168 circuits	Less than or equal to 2.5 seconds
Options	
Local LCD display w/audible alarm	
Energy monitoring	

Contact us

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