

BRANCH CIRCUIT MONITORING SYSTEM



DATA CENTER PANELBOARD AND BUSWAY MONITORING

Raritan's intelligent Branch Circuit Monitoring (BCM) system allows you to fully utilize your power infrastructure and manage capacity as your data center grows and changes. Whether you are retrofitting an existing facility, or planning for growth or new construction, Raritan's BCM system can help you reduce energy costs, track power usage, and prevent downtime. Easily add metering where it never existed before.

This easy-to-deploy modular system, enables real-time views of electrical capacity and power usage on branch circuits, and mains, in an electrical service entrance, or a remote power panel. It sends threshold alerts for power and environmental conditions, thereby helping to prevent downtime. The stored data can also support energy efficiency and customer charge-back initiatives. Plus it integrates with many DCIM monitoring software, other building management system (BMS).

COMPONENTS OF THE SYSTEM



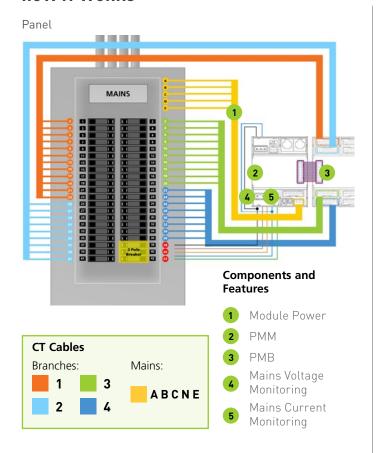
FEATURES & BENEFITS

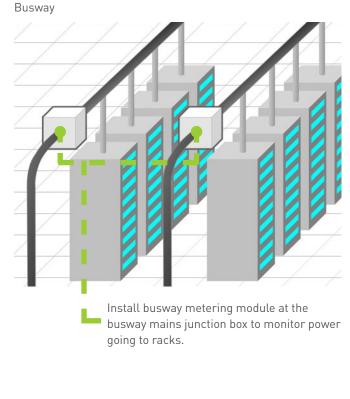
- Meters Floor PDUs, RPPs, Panelboards, and Busways
- One controller supports up to 70 power meters
- Quick configuration via USB stick preloaded with panel schedule
- CTs easily connect to live circuits
- Auto-correct metering adjusts for CT orientation on wires
- USB ports for configuration, Wi-Fi networking, and remote data display
- Includes several enclosure options: floor, wall, and rack mounts
- Powered by the same Xerus[™] firmware as Raritan rack PDUs
- Remote display option through the PDView app
- Collects data on: A, V, kW, kVA, power factor, and kWh
- Protocols supported: TCP/IP, Modbus, and SNMP
- Environmental sensor support

METER WHERE YOU NEVER COULD BEFORE

The BCM leverages the proven technology of Raritan's rack PDUs to monitor power upstream from IT equipment racks. Monitor power at the panelboard, floor PDU, remote power panel or overhead busway, in real-time.

HOW IT WORKS





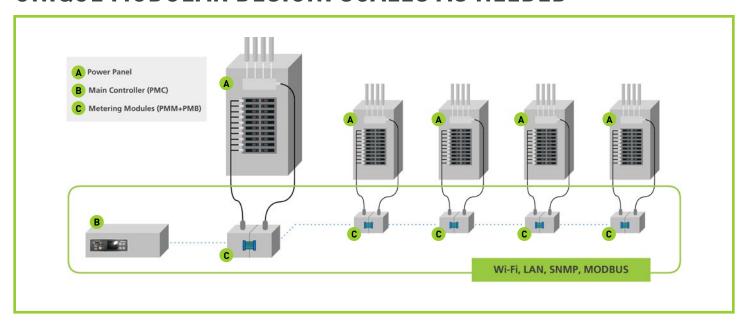
LOWER YOUR TOTAL COST OF OWNERSHIP

- Control up to 70 power meters with a single controller
- Protocols supported: TCP/IP, Modbus, and SNMP
- Built-in redundancy; all modules function as long as one meter remains powered
- Accessible using Wi-Fi networking access
- Highest density branch circuit metering 96 branch circuits
- Easy to install, configure, and scale
- Prevents downtime and improves the efficiency of maintaining your power infrastructure

FEATURES THAT SAVE YOU THE TIME AND HASSLE

- Upload panel schedule to USB stick for circuit mapping and configuration setup (can be disabled)
- Supports both panelboards and busway under the same system
- Remote display option available through the Raritan PDView app
- Fully supported as a panelboard in Power IQ® DCIM Monitoring Software
- Powered by the same Xerus[™] firmware as Raritan rack PDUs

UNIQUE MODULAR DESIGN: SCALES AS NEEDED



DESIGNED FOR SIMPLE INSTALLATION AND CONFIGURATION

- Split core CTs attach to existing branch circuits and mains
- The CTs can be installed in either direction; metering system auto-corrects
- Several mounting options including: subfloor, wall mount, IT rack, and DIN rail
- The wiring harness allows you to install the CTs without a lot of excess wires
- Simplified and clean wire installation using multiconductor cable fed into panel to attach CTs
- Auto correct metering adjusts for CT orientation on wires and prevents mistakes
- CTs connect to live circuits without downtime or damage to CT
- Labeled CT wiring eliminates errors
- Keyed locking connectors for error proof and reliable connection
- Real-time configurator displays current and phase allowing you to confirm correct installation
- Quick configuration via USB stick preloaded with panel schedule

Simple management via Power IQ® Monitoring Software



ADVANCED METERING AND MONITORING

- Data is remotely accessible via network; or locally on a high-res color display or tablet
- Provides data center and facilities managers with real-time and historical views of electrical capacity and power usage
- Supports both panelboards and busway under the same system
- Measures kWh with ISO/IEC +/- 0.5% billing grade accuracy for accurate customer chargeback reports and energy efficiency initiatives
- Collected data can be used to reduce downtime and drive efficiency initiatives
- Power data readily available with Power IQ®
 Software or other building management systems



Labeled CT cable connectors ease panel position mapping

Locking connectors for errorproof and reliable connections



| Enclosures | Description | |
|---------------|---|--|
| BCM2-9610 | 96 Channel Branch Circuit Meter Enclosure - Supports 208V 3Phase power metering with L21-20P input. Monitor 3Phase Mains lines, Neutral and Ground and up to 96 branch circuits. Metering accuracy to 0.5%. Includes intelligent controller for remote access. | |
| BCM2-9610Y | 96 Channel Branch Circuit Meter Enclosure - Supports up to 415V 3Phase power metering with 16A Terminal input. Monitor 3Phase Mains lines, Neutral and Ground and up to 96 branch circuits. Metering accuracy to 0.5%. Includes intelligent controller for remote access. | |
| BCM2-9610-G0 | 96 Channel Branch Circuit Meter Enclosure - Supports 208V 3Phase power metering with L21-20P input. Monitor 3Phase Mains lines, Neutral and Ground and up to 96 branch circuits. Metering accuracy to 0.5%. No intelligent controller for remote access. | |
| BCM2-9610Y-G0 | 96 Channel Branch Circuit Meter Enclosure - Supports up to 415V 3Phase power metering with 16A Terminal input. Monitor 3Phase Mains lines, Neutral and Ground and up to 96 branch circuits. Metering accuracy to 0.5%. No intelligent controller for remote access. | |

| Current Transformers | Description |
|----------------------|--|
| BCM2-250A-CT-3PK | 3x 250A/0.5%/333mV/24 ["] /610mm lead |
| BCM2-1A-CT | 1x 1A/0.5%/333mV/24 ["] /610mm lead |
| BCM2-60A-CT-12PK | 12x 60A/0.5%/333mV/24 ["] /610mm lead |
| Controllers | Description |
| PMC-1000 | Power Meter Controller - wall mount |
| PMC-1001 | Power Meter Controller - 19" rack mount |
| Cables | Description |
| BCM2-BCTcable-3M-1 | Branch Circuit cable for 12x CTs, 10ft (3m) |
| BCM2-BCTcable-3M-2 | Branch Circuit cable for 12x CTs, 10ft (3m) |
| BCM2-BCTcable-3M-3 | Branch Circuit cable for 12x CTs, 10ft (3m) |
| BCM2-BCTcable-3M-4 | Branch Circuit cable for 12x CTs, 10ft (3m) |
| BCM2-MCTcable-3M | Mains Circuit cable for 5x CTs, 10ft (3m) |

| Motor Moscuroment Assuracy | | | | |
|----------------------------|--|--|--|--|
| Meter Measurement Accuracy | | | | |
| Active Power & Energy | 0.5%: IEC 62053 Class .5, EN 50470-3 Class C | | | |
| Reactive Power & Energy | 2% | | | |
| RMS Voltage & Current | 0.2% | | | |
| Frequency | 0.1% | | | |
| Sample Rate | 64x 50 or 60 Hz (phase locked) | | | |
| Measurement Update Rate | 3 secs: IEC 61000-4-30 Class S | | | |
| Conformance | | | | |
| Safety | UL/EN 61010-1 | | | |
| EMC/EMI | EN61326-1, FCC Part 15 Class A | | | |
| Voltage Measurement Inputs | | | | |
| Input Range* | 90-277V LN, 156-480V LL | | | |
| Measurement Category | CAT III, Pollution Level 2 | | | |
| Frequency | 50/60 Hz | | | |
| Current Measurement Inputs | | | | |
| СТ Туре | Voltage Output = 333 mV at rated current | | | |
| CT Rated Current | 1-2000A | | | |
| Environmental | | | | |
| Operating Temperature | 0°-60°C (32°-140°F) | | | |
| Operating Humidity | 0°-60°C (32°-140°F) | | | |
| Operating Elevation | 0-3000m | | | |
| Power Requirements | | | | |
| Voltage | 90-240V | | | |
| Current | 0.2A | | | |

^{*}Ratings for models with field wiring terminals. For models with factory installed line-cords, rating is limited by plug and ratings are labeled on back on unit.

Visit www.raritan.com/bcm or Call 1.800.724.8090 for more information.

