

BCM Intelligent Branch Circuit Monitor



BCM Series

Raritan's Intelligent Branch Circuit Monitoring (BCM) solution has the ability to monitor power and energy at the mains (input) and branch circuit level.

3 Mains Lines:

- ▶ RMS current per line (A)
- ▶ RMS voltage per line pair (V)
- ▶ Active power (W)
- ▶ Apparent power (VA)
- ▶ Power factor (PF)
- ▶ Mains active energy (Watt hours) at ISO/IEC +/- 1%
- ▶ Unbalanced load percentage (three phase only)

21 Branch Circuits:

- ▶ RMS current (A)
- ▶ RMS voltage (V)
- ▶ Active power (W)
- ▶ Apparent power (VA)
- ▶ Power factor (PF)
- ▶ Branch active energy (Watt hours) at ISO/IEC +/- 1%
- ▶ Unbalanced load percentage (three phase only)

Other features:

- ▶ Meets ISO/IEC 62053 standards
- ▶ Supports up to 16 external optional sensors
- ▶ Network accessible via 10/100 Ethernet or WiFi
- ▶ Web browser accessible
- ▶ Manageable via open interfaces: SNMP, SSH, HTTP/S, with full scripting JSON-RPC

Intelligent Branch Circuit Monitoring

Budget-friendly circuit monitoring to enable smart energy management

Today, there is an increasing need to monitor power consumption to minimize costs and meet corporate green initiatives including minimizing carbon footprint. In some areas of the world, such as Europe, there are regulations such as ISO/IEC 62053 standards for energy monitoring. Raritan's intelligent Branch Circuit Monitoring (BCM) appliance meets or exceeds these directives.

Raritan's BCM provides power and energy data on branch circuits and mains in an electrical service entrance or a remote power panel. It provides an accurate view of electrical capacity, energy use, and monitoring for uptime and reliability. Anytime a circuit's current approaches a breaker's limit, BCM sends an alarm, helping you to prevent potential problems. Customizable alarms allow the operator to easily set sensitivity parameters.

Increase your billing accuracy and properly charge customers for their true energy costs instead of a general energy charge per section of assigned space. Data from BCM enables you to show or charge customers and departments based on actual energy consumption. Customers or departments that use more power and require more infrastructure are charged accordingly.

Why intelligent branch circuit monitoring?

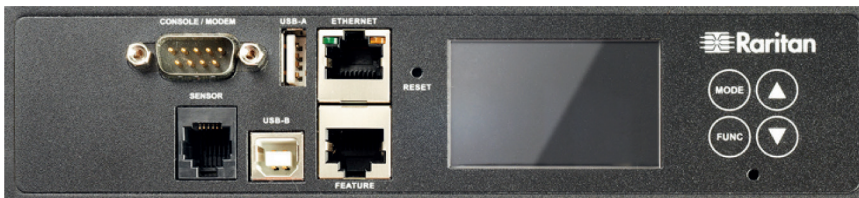
- ▶ Instrument distribution systems where basic rack pdus are deployed
- ▶ Increase availability of power by preventing branch circuit overload
- ▶ Avoid stranded power
- ▶ Manage capacity of electric service panels or remote power panels
- ▶ Complete, accurate view of branch circuit loading
- ▶ Improve balancing of loads
- ▶ Monitor breakers so as not to exceed the capacity limit
- ▶ Support energy saving and green initiatives
- ▶ Allocate costs to specific users, customers, and departments

Simplified branch power monitoring

BCM available models

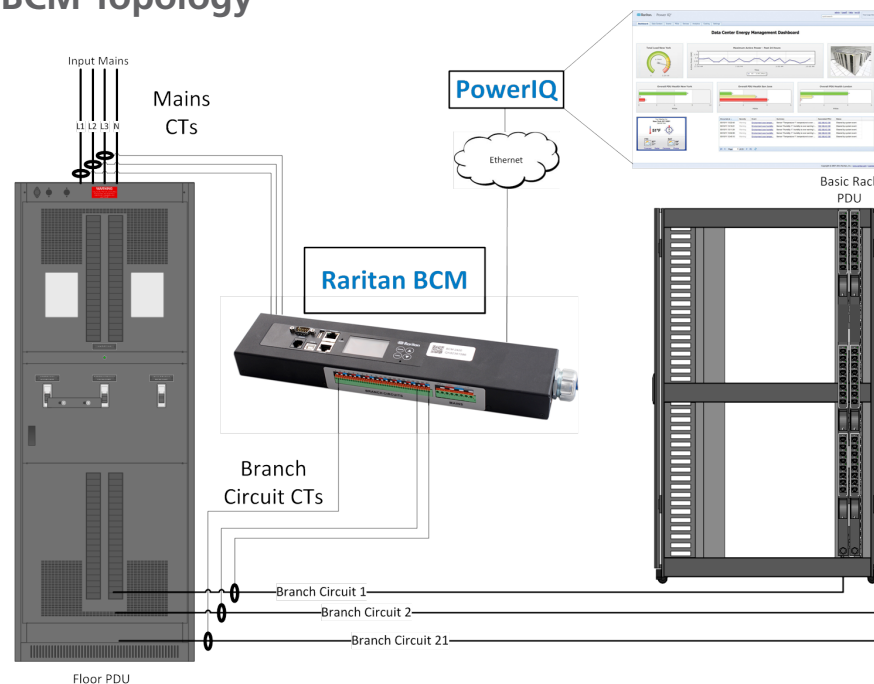
Model/KITs	Description
BCM-2401	Branch Circuit Monitor – Main Head Unit / Controller with support for 3 x Mains-CT and 21 Branch-CT, Ethernet, Serial, Environmental Sensor and USB support (Wi-Fi, Webcam, USB-Cascade) Requires CTs.
Mains Current Transformer KITs - 1 x Mains CT Kit per BCM-2401	
BCM-2000A-MCT-3PK	Three 2000A mains split-core current transformers (+/- 0.5% accuracy), cord length 10ft (3m)
BCM-1000A-MCT-3PK	Three 1000A mains split-core current transformers (+/- 0.5% accuracy), cord length 10ft (3m)
BCM-250A-MCT-3PK	Three 250A mains split-core current transformers (+/- 0.5% accuracy), cord length 10ft (3m)
Branch Current Transformer KITs - 1 x Branch CT Kit per BCM-2401	
BCM-400A-BCT-21PK	Twenty-one 400A branch circuit split-core current transformers (+/- 1.0% accuracy), cord length 6.6ft (2m)
BCM-200A-BCT-21PK	Twenty-one 200A branch circuit split-core current transformers (+/- 1.0% accuracy), cord length 6.6ft (2m)
BCM-100A-BCT-21PK	Twenty-one 100A branch circuit split-core current transformers (+/- 1.0% accuracy), cord length 6.6ft (2m)
BCM-60A-BCT-21PK	Twenty-one 60A branch circuit split-core current transformers (+/- 1.0% accuracy), cord length 6.6ft (2m)
BCM-32A-BCT-21PK	Twenty-one 32A branch circuit split-core current transformers (+/- 1.0% accuracy), cord length 6.6ft (2m)
Branch Circuit Monitor KITs - Includes 1 x BCM-2401, 3 x Mains CTs and 21 x Branch CTs	
BCM-2401-KIT-01	1 x BCM-2401 (Head Unit) with 3 x 250A Mains-CT (+/- 0.5% Accuracy) and 21 x 32A Branch-CT (+/- 2% Accuracy), Ethernet, Serial, Environmental Sensor and USB support (Wi-Fi, Webcam, USB-Cascade)
BCM-2401-KIT-02	Includes BCM-2401 (Head Unit) with 3 x 250A Mains-CT (+/- 0.5% Accuracy) and 21 x 100A Branch-CT (+/- 1% Accuracy), Ethernet, Serial, Environmental Sensor and USB support (Wi-Fi, Webcam, USB-Cascade)
BCM-2401-KIT-03	1 x BCM-2401 (Head Unit) with 3 x 250A Mains-CT (+/- 0.5% Accuracy) and 21 x 400A Branch-CT (+/- 0.5% Accuracy), Ethernet, Serial, Environmental Sensor and USB support (Wi-Fi, Webcam, USB-Cascade)
BCM-2401-KIT-04	1 x BCM-2401 (Head Unit) with 3 x 250A Mains-CT (+/- 0.5% Accuracy) and 21 x 200A Branch-CT (+/- 0.5% Accuracy), Ethernet, Serial, Environmental Sensor and USB support (Wi-Fi, Webcam, USB-Cascade)

BCM display and ports



- ▶ Smart LCD display allows you to scroll through main and branch circuit information at the power panel
- ▶ Flexible and versatile connections for 10-100 Mbps Ethernet, RS-232 serial, Feature/KVM, USB-A (host), USB-B (device) and sensors

BCM Topology



- ▶ 21 branch circuit connections
- ▶ 3 line connections L1, L2 and L3 for mains metering

Visit www.raritan.com/ap/BCM

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Raritan provides secure IT infrastructure management solutions that increase data center efficiency and productivity by delivering integrated in-band and out-of-band server access, control and power management. Raritan's KVM, serial console and intelligent PDU products are in use at over 50,000 locations worldwide. Raritan's OEM division provides embedded hardware and firmware for server and client management, including KVM over IP, IPMI, intelligent power management and other industry standards-based management applications.

Based in Somerset, NJ, Raritan has 38 offices worldwide, serving 76 countries. For more information, please visit www.raritan.com/ap/.