



## 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 data can also support energy efficiency and customer charge-back initiatives. Plus it integrates with Power IQ® DCIM Monitoring Software, and other building management system (BMS) and DCIM solutions.

### FEATURES AND BENEFITS

- Meters Floor PDU, RPPs, Panelboards, and Busways
- One controller supports up to 70 power meters
- Quick configuration via USB stick preloaded with panel schedule
- CTs connect to live circuits
- Auto-correct metering adjusts for CT orientation on wires
- Real-time configurator
- USB ports for configuration, Wi-Fi networking, and tablet display
- Supported by DCIM software
- Several enclosure options
- Same firmware as Raritan rack PDUs
- Remote display using PDView app (available for iOS and Android)
- Collects data on: A, V, kW, kVA, power factor, and kWh
- Protocols include TCP/IP, Modbus and SNMP
- Environmental sensor support

#### COMPONENTS OF THE SYSTEM



BRANCH METERING ENCLOSURE



DIN RAIL MODULES (CONNECTED)



CABLING



CURRENT TRANSFORMERS (CTS)

# METERING WHERE IT NEVER EXISTED BEFORE

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

## LOWER YOUR TOTAL COST OF OWNERSHIP

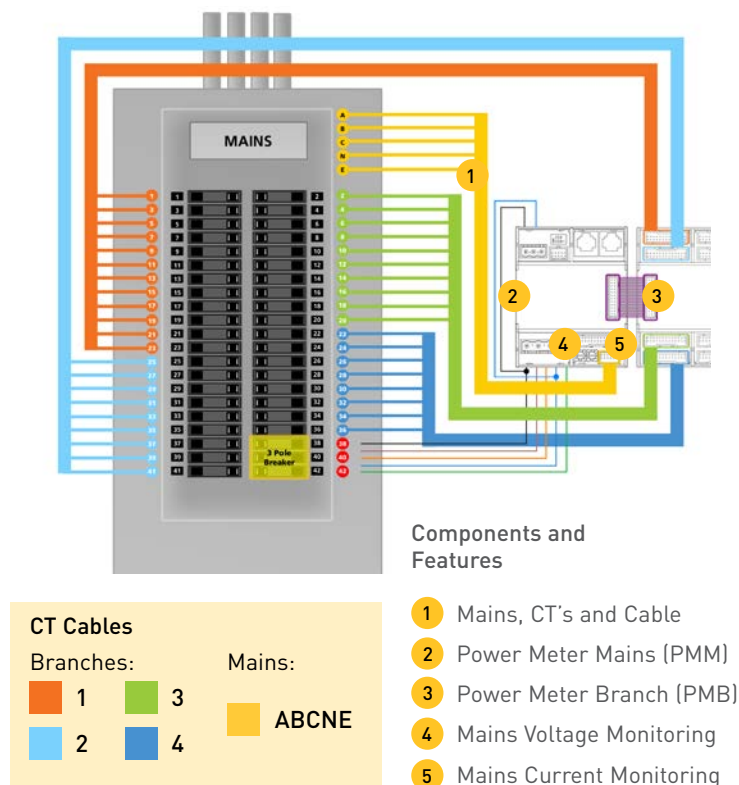
- Control up to 70 power meters with a single controller.
- Protocols include TCP/IP, Modbus and SNMP.
- Built-in redundancy; all modules function as long as one meter remains powered.
- Accessible using Wi-Fi networking access.
- Highest density branch circuit metering -- 96 branch circuits.
- Easy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

## FEATURES THAT SAVE YOU TIME AND HASSLE

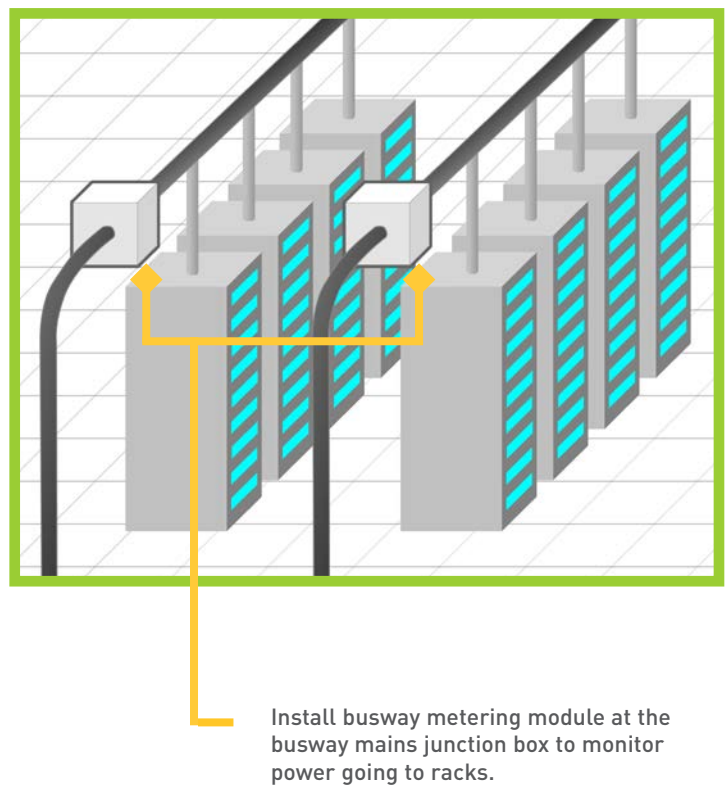
- Upload panel schedule to USB stick for circuit mapping and configuration setup (can be disabled).
- Mix and match same modules for busway and panelboard monitoring.
- PDView tablet app for easily viewing large amounts of information.
- Fully supported as a panelboard in Power IQ DCIM Monitoring Software.
- Same firmware as Raritan rack PDUs.

## HOW IT WORKS

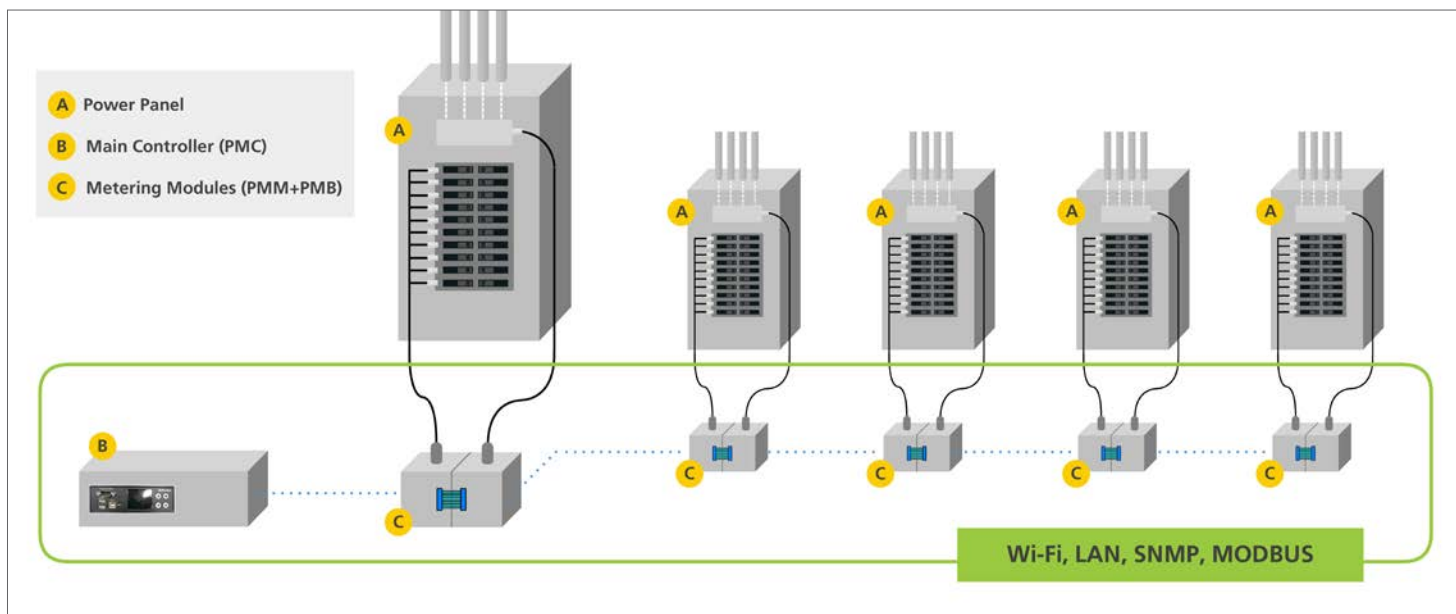
Panel



Busway



# UNIQUE MODULAR DESIGN: ADD METERING ONLY WHEN NEEDED



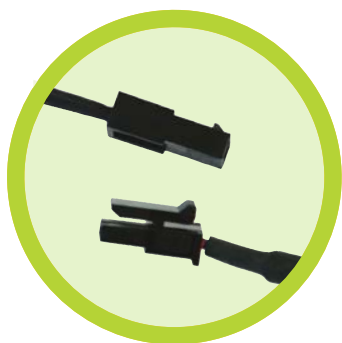
## DESIGNED FOR SIMPLE INSTALLATION AND CONFIGURATION

- Split core current transformers (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 multi-conductor cable fed into panel to attach CTs.
- Auto correct metering adjusts for CT orientation on wires, prevents mistakes.
- CTs connect to live circuits without downtime or damage to CT.
- Labeled CT wiring to eliminate 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.

## ADVANCED METERING AND MONITORING

- Power data readily available with Power IQ Software or other building management systems.
- Data is remotely accessible via web; or locally on a high-resolution colour display or tablet.
- Provides data center and facilities managers with real-time and historical views of electrical capacity and power usage.
- Mix and match same modules for busway and panelboard monitoring.
- Measures kWh with +/- 0.5% billing grade accuracy.
- Collected data can be used to reduce downtime and drive efficiency initiatives.



Locking connectors for error-proof and reliable connections.



Simple management via PowerIQ Monitoring Software.



Labeled CT cable connectors ease panel position mapping.

PART NUMBERS	DESCRIPTION
BCM2-DIN-KIT-Y01	<b>Power Panel Distribution Board Meter: Input: 3 Phase 250A, Output: 24x Single Phase Branch Circuits INCLUDING Controller</b> 1x PMC-1001 (Rack/Wall Mount Power Meter Controller) 1x PMM-1000 (3PH, 480V AC DIN Rail Power Meter Module) 1x PMB-1960 (96 Port Power Meter Branch) 1x BCM2-250A-CT-4PK (4x 250A Current Transformers/~0.5% Accuracy/333mV/24"/610mm Lead) 1x BCM2-MCTcable-3M (Mains Circuit Cable for 5x CTs) 2x BCM2-60A-CT-12PK (12x 60A Current Transformers/~0.5% Accuracy/333mV/24"/610mm Lead) 1x BCM2-BCTcable-3M-1 1x BCM2-BCTcable-3M-2 1x BCM2-BCTcable-3M-3 1x BCM2-BCTcable-3M-4
BCM2-DIN48-KIT-Y01	<b>Power Panel Distribution Board Meter: Input: 3 Phase 250A, Output: 48x Single Phase Branch Circuits INCLUDING Controller</b> 1x PMC-1001 (Rack/Wall Mount Power Meter Controller) 1x PMM-1000 (3PH, 480V AC DIN Rail Power Meter Module) 1x PMB-1960 (96 Port Power Meter Branch) 1x BCM2-250A-CT-4PK (4x 250A Current Transformers/~0.5% Accuracy/333mV/24"/610mm Lead) 1x BCM2-MCTcable-3M (Mains Circuit Cable for 5x CTs) 4x BCM2-60A-CT-12PK (12x 60A Current Transformers/~0.5% Accuracy/333mV/24"/610mm Lead) 1x BCM2-BCTcable-3M-1 1x BCM2-BCTcable-3M-2 1x BCM2-BCTcable-3M-3 1x BCM2-BCTcable-3M-4
BCM2-DIN72-KIT-Y02	<b>Power Panel Distribution Board Meter: Input: 3 Phase 400A, Output: 72x Single Phase Branch Circuits INCLUDING Controller</b> 1x PMC-1001 (Rack/Wall Mount Power Meter Controller) 1x PMM-1000 (3PH, 480V AC DIN Rail Power Meter Module) 1x PMB-1960 (96 Port Power Meter Branch) 1x BCM2-400A-CT-4PK (4x 400A Current Transformers/~0.5% Accuracy/333mV/24"/610mm Lead) 1x BCM2-MCTcable-3M (Mains Circuit Cable for 5x CTs) 6x BCM2-60A-CT-12PK (12x 60A Current Transformers/~0.5% Accuracy/333mV/24"/610mm Lead) 1x BCM2-BCTcable-3M-1 1x BCM2-BCTcable-3M-2 1x BCM2-BCTcable-3M-3 1x BCM2-BCTcable-3M-4 1x BCM2-BCTcable-3M-5 1x BCM2-BCTcable-3M-6

Note: This is only a small sample of the available KITS we offer. Please contact sales for more configurations

VOLTAGE MEASUREMENT INPUTS		Meter Measurement Accuracy	
Input Range*	90-277V LN, 156-480V LL	Active Power & Energy	0.5%: IEC 62053 Class .5, EN 50470-3 Class C
Measurement Category	CAT III, Pollution Level 2		
Frequency	50/60 Hz	Reactive Power & Energy	2%
CURRENT MEASUREMENT INPUTS		RMS Voltage & Current	0.2%
CT Type	Voltage Output = 333 mV at rated current	Frequency	0.1%
CT Rated Current	1-1200A	Sample Rate	64x 50 or 60 Hz (phase locked)
ENVIRONMENTAL		Measurement Update Rate	3 secs: IEC 61000-4-30 Class S
Operating Temperature	0°-60°C (32°-140°F)	CONFORMANCE	
Operating Humidity	5-85%	Safety	UL/EN 61010-1
Operating Elevation	0-3000m	EMC/EMI	EN61326-1, FCC Part 15 Class A
POWER REQUIREMENTS			
Voltage	90-240V		
Current	0.2A		



### ENDORSEER OF THE EU CODE OF CONDUCT ON DATA CENTRE ENERGY EFFICIENCY

Formulated by the EU's Joint Research Centre, the Code is a measured response to the energy challenges the EU faces. It's aim is to encourage companies with data centers to reduce energy consumption while ensuring business objectives continue to be met.

As an endorser, Raritan have pledged to implement the Code's ethos through devising products and services that help organizations to bring their data centers into line with its best practice recommendations.

Visit [www.raritan.eu](http://www.raritan.eu) or call +31 (0)10 284 4040 to learn more about the BCM2.

