

EDUCATIONAL BRIEF

RESIDUAL CURRENT MONITORING

Raritan PX3 Intelligent PDUs are the leading quality products for large scale data center deployments, providing higher reliability and resistance to harsh environments than most PDUs on the market. To further the PX3 metering capabilities and enable new exclusive ways to monitor the power quality in the data center. Raritan has developed an innovative approach to help enterprise data center operators monitor residual currents efficiently and provide a safe working environment

BE ALERTED OF LEAKAGE CURRENT IN REAL-TIME

A Residual Current Monitor detects residual current. In power circuits, current normally flows only in the phase and neutral wires. Residual current is flowing in the ground wire through the exposed metal parts within the rack (or other path to ground) and presents a significant danger for humans and IT equipment and is known as leakage current.

Raritan offers Residual Current Monitoring (RCM) Type A and Type B/B+ Options, linked to the PX alerting engine for easy threshold definition and enabling the powerful rule-based alerting function of Raritan Xerus platform.

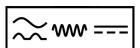
RARITAN RESIDUAL CURRENT MONITORING OPTIONS:

RCM Type A



Detects AC leakage and is sensitive down to 6mA (IEC62020) leakage. PX Models ending in -M5

RCM Type B - 1 Channel & Type B - 3 Channels



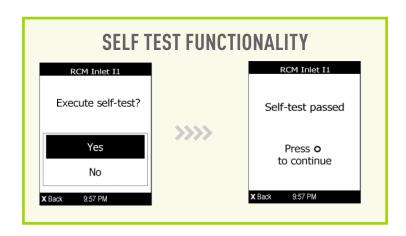
Detects AC and DC leakage and is sensitive down to 15mA (IEC62020). PX Models ending in -M11(1Channel) / -M18 (3Channel)

LABOR-FREE PATENTED AND RELIABLE MONITORING TECHNOLOGY

Raritan RCM Sensor is equipped with a patented self-test function, designed to detect leakage current (avoid false positive/negative readings), removing the need for manual testing from an electrician causing downtime for testing process. Self-test can be automated and scheduled at will, keeping you in control.

A 15mA current is added through the RCM sensor

- If test passed return to normal operating condition
- If test fail sensor failure state with alerting



OBTAIN TIMELY ALERTS WITH ADJUSTABLE THRESHOLDS AND MAINTAIN UPTIME

Raritan residual current sensor helps you maintain uptime by providing residual current monitoring data into your DCIM or BMS software. By adding RCM measurements to other power quality readings from the environment (transient and total harmonic distortion), you can identify which server power supply is at risk and could eventually fail. Your PX intelligent PDU can be easily configured to send the appropriate SNMP traps and MODBUS alerts to your monitoring software or service provider to act preemptively.

EMBEDDED NEUTRAL CURRENT METERING SENSOR

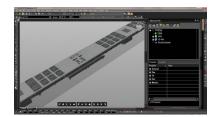
All Raritan PDUs equipped with RCM Sensors also measure neutral current to 1% accuracy as specified by EN50600 2.2, making your Raritan PDU "EN50600 Ready!

Benefits of Raritan neutral metering sensor:

- Overload or possible interruption of the N conductor are signaled at an early stage
- Reliability of operation and system safety are considerably improved
- Potential fire hazards and risk of equipment downtime are recognized as they are developing
- Maintenance costs are considerably reduced



- RCM and Neutral current Monitoring sensors embedded in the inlet section
- Flush-mount circuit breakers eliminating dog houses
- 3D designed Aluminum chassis with replaceable controller
- High quality input plug glands and cables



EN50600 ★ Rea

CHOOSE RARITAN FOR INSTANT COMPLIANCE WITH EN50600 2-2

Raritan PX Intelligent PDU Models offer the complete set of power measurements and options needed to comply with EN50600. Ask your Raritan representative about the different configurations possible to satisfy your data center deployment within these standards!

Raritan Critical PDU readings compliant with CENELEC – EN50600 2-2: Power Distribution:

Easily monitor with each model:

- Power Factor
- Current
- Output Voltage
- Neutral Conductor
- kVA
- kWh
- Residual Current (Optional)
- Outlets and branch circuits
- PDU Inlet

RARITAN EN50600 CATALOG MODELS Visit the PDU Product Selector. today and select the Rack PDU that's right for you. 1,000+ unique Raritan models: FindmyPDU.com

Visit www.raritan.eu or call +31 (0)10 284 4040 to learn more about Residual Current Monitoring.

