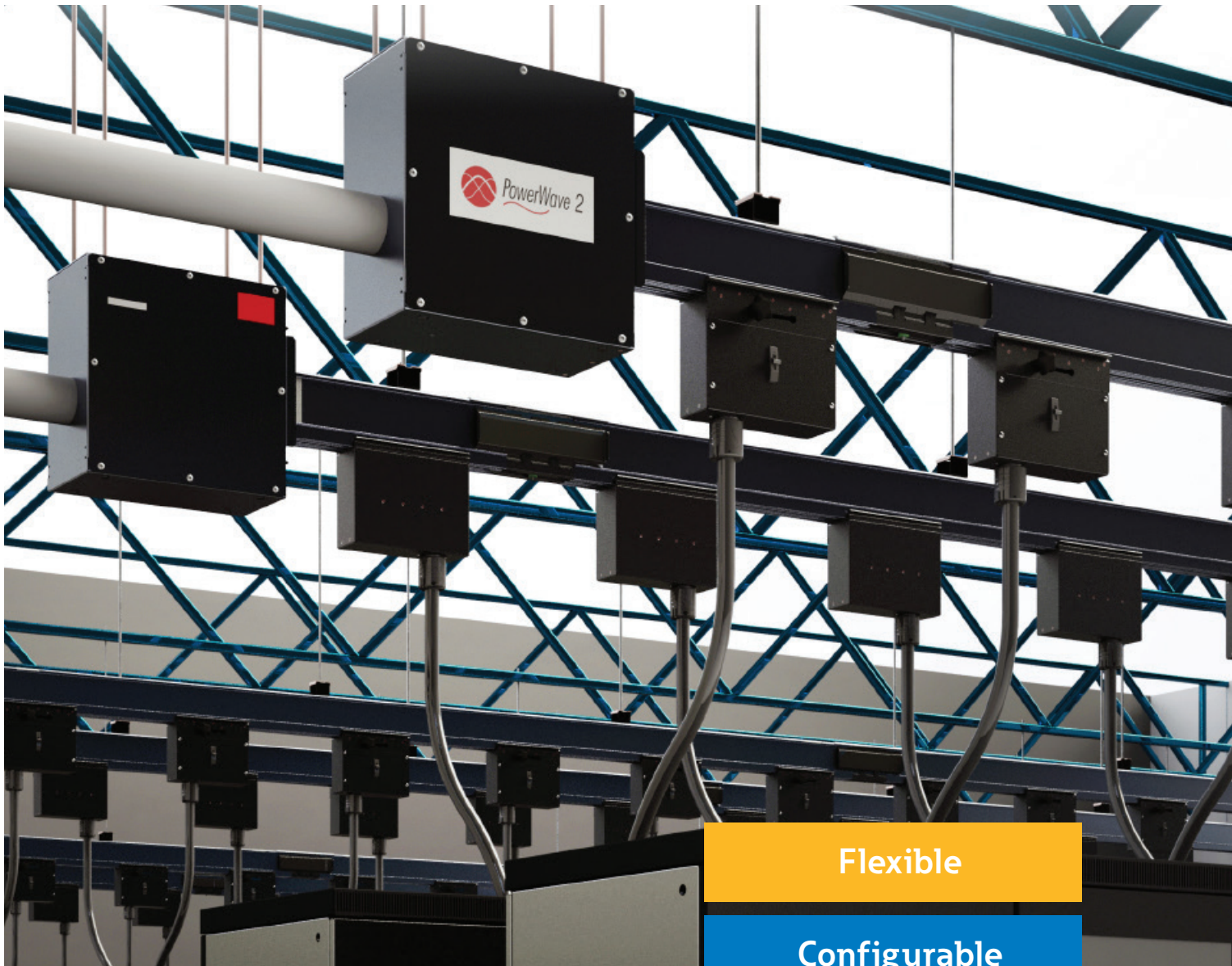


Flexible, intelligent power distribution for mission-critical applications



Flexible

Configurable

Simple

Intelligent

Safe

EATON

Powering Business Worldwide

PowerWave 2:

next-generation power
distribution is here



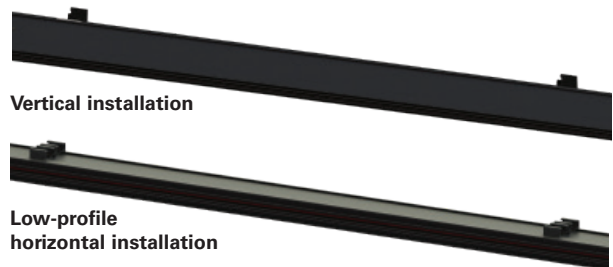
Ideal for data centers and other mission-critical facilities, Eaton's PowerWave® 2 power distribution busway system combines flexibility, simplicity and safety in a single, highly configurable design.

Easy to install and use, the intelligent, overhead distribution system is packed with safety features, including ASME-standard silver plating on every conductor and contact point. Originally developed for military applications, the plating reduces contact resistance by nearly 50 percent over industry-standard tin plating — reducing heat build-up and decreasing temperature variability at contact points to achieve industry-leading busway power distribution reliability.

PowerWave 2 features and benefits

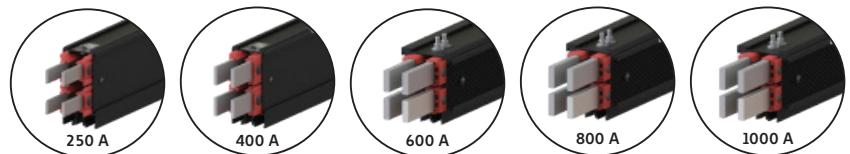
Infinite flexibility

- **Continuous open channel design** allows tap-off boxes to be placed anywhere along the bus rails
- **Countless layout options** — including custom lengths for rails, 90° elbows, and 90° and 180° tees — enable the system to be incorporated into virtually any facility
- **Various mounting style options** allow the PowerWave 2 to be oriented vertically or horizontally — overcoming space constraints with the ability to fit over a rack or under the floor



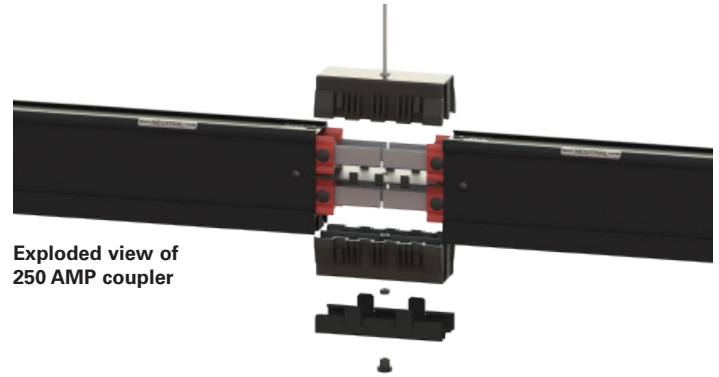
Valuable configurability

- **Multi-range ampacity bus rails (250, 400, 600, 800 and 1000 Amp)** support a wide range of power loads and enable facility managers to meet mission-critical requirements while reducing expenses with right-sized equipment
- **Bus rails** to meet your exact mission-critical power needs



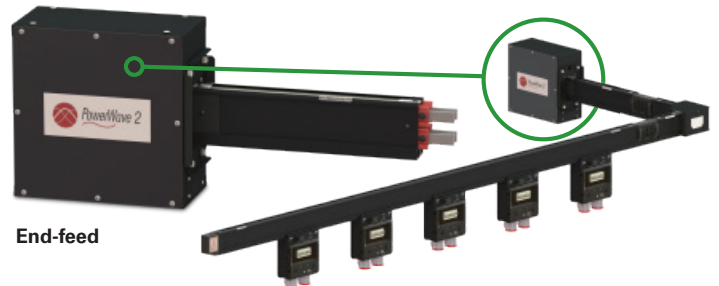
Installation simplicity

- **Rugged yet lightweight ToughRail Technology® system design** allows for easy handling and installation with up to 60 percent savings in time and labor over competitive cable and conduit solutions
- **Visual indicators effectively support the secure installation of the busway system**, while hangers are engineered to work with standard Unistrut® Channel Nuts
- **Easy-to-install coupler** (using only a Phillips head screwdriver and Allen wrench) makes deployment fast and easy
- **Minimal lifting required** since coupler is installed after bus rails have been hung



Ultimate intelligence

- **End-feed power monitoring** allows for proactive management of power usage and availability, with data including: phase current, voltage L-L, voltage L-N, frequency, crest factor, total harmonic distortion, power (kW, kVA, kVAR), power factor, energy consumption (kWh) and per end-feed
- **Ability to set threshold alarms** for maximum or minimum values for each feature
- **Standard protocols of modbus RTU, modbus TCP/IP, and SNMP** can be output to deliver power data to building management systems or DCIM software, with capabilities to provide power monitoring data to remote locations



Unparalleled safety

- **Highest quality components** ensure ultimate reliability and safety
- **Finger-safe bus rails** completely isolate conductors during installation and removal of tap-off boxes, keeping personnel safe while maintaining power to mission-critical loads
- **ASME-standard silver plating in PowerWave 2** achieves half of the contact resistance as industry-standard tin plating, reducing heat build-up and decreasing temperature variability at contact points
- **While UL requirements prohibit a power busway system from increasing temperature** while operating above 55 °C, the PowerWave 2 busway system nearly cuts this in half by providing rated continuous current at a maximum 35 °C temperature rise — ensuring the maximum ambient operating temperature in the industry



60 °C

ETL tested
and qualified

* 250 and 400 A systems with monitoring are qualified to 40 °C, circuit breakers require derating.

Technical specifications:

Ratings

Input / output	3-phase, 4-wire plus ground. Optional isolated or dedicated ground
Ampacity	250 A, 400 A, 600 A, 800 A, 1000 A
Voltage	600 VAC maximum
Frequency	50 Hz / 60 Hz
Neutral rating:	100% or 150% neutral
Tap off box rating:	128 Amps maximum per phase
Protection	IP2X finger-safe
Short circuit ratings	<ul style="list-style-type: none">• 250 A: 42 kA @ 120/208 VAC, 35 kA @ 277/480 VAC, 22 kA @ 347/600 VAC• 400 A: 42 kA @ 120/208 VAC, 35 kA @ 277/480 VAC, 22 kA @ 347/600 VAC• 600 A: 42 kA up to 600 VAC• 800 A: 42 kA up to 600 VAC• 1000 A: 42 kA up to 600 VAC
Voltage drop:	2 V per 100 ft. [30.5 m]

Safety standards

ETL classified to UL 857, CSA C22.2 No. 27, and IEC 60439-2 standards
UL/CSA standards limit ratings to 225 A for the United States and 400 A for Canada for continuous plug-in busway

Mounting options

ETL classified to UL 857, CSA C22.2 No. 27, and IEC 60439-2 standards
UL/CSA standards limit ratings to 225 A for the United States and 400 A for Canada for continuous plug-in busway

Operating conditions

Storage temperature	-67 ° to +185 °F (-55 ° to +85 °C)
Operating temperature	+32 ° to 104 °F (0° to 40 °C)
Audible noise	≤ 45 dBA
Relative humidity	0% to 95% non-condensing
Operating altitude	Up to 6,600 ft. (2,000 m)

BCMS monitoring

Monitor	QTY 2 circuits with 3P+N
Communications	Serial RS-485 Modbus® RTU; Modbus® TCP/IP or SNMP communications
Indicator	Breaker status indicator lights
Display	BCMS Hub (10.4 in Touchscreen); 240 devices

Testing

PowerWave® 2 busway system shall be factory tested before shipment. Testing shall include:	<ul style="list-style-type: none">• Hi-Pot test at 2X the unit's rated voltage plus 1000 volts per UL 857• Receptacle or connector and breaker configuration• Phase wiring/connectivity test• Ground fault path test
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System weight

250 A busway	6.8 lb/ft.
400 A busway	9.6 lb/ft.
600 A busway	12.6 lb/ft.
800 A busway	19.4 lb/ft.
1000 A busway	24.2 lb/ft.

Service and support

After your equipment has been installed, call on the Eaton service team, at 1.800.225.4838, for 24/7 support. With four decades of mission-critical power experience and seasoned factory-trained service staff, Eaton can maximize the benefit of your equipment investment.

For more information, please visit:
Eaton.com/busway

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