GE
Critical Power

Zenith™ Series DPB

Distributed Power Busway

imagination at work

Touching all Areas of the Energy Industry

GE's diverse portfolio of products and services is helping customers solve problems every day. We touch all areas of the energy industry including energy, electrical management, smart grid modernization, coal, oil, gas, nuclear energy, water, wind, solar and biogas.

Providing Reliable Power to your Mission-Critical Business Needs

With a comprehensive energy management portfolio, GE is uniquely qualified to provide comprehensive datacenter, commercial and industrial infrastructure solutions from its' Industrial Solutions and Critical Power businesses. Due to the inherent high-efficiencies offered with GE electrical distribution equipment and GE UPS systems, measurement of PUE can be maximized by the integrated use of these solutions.

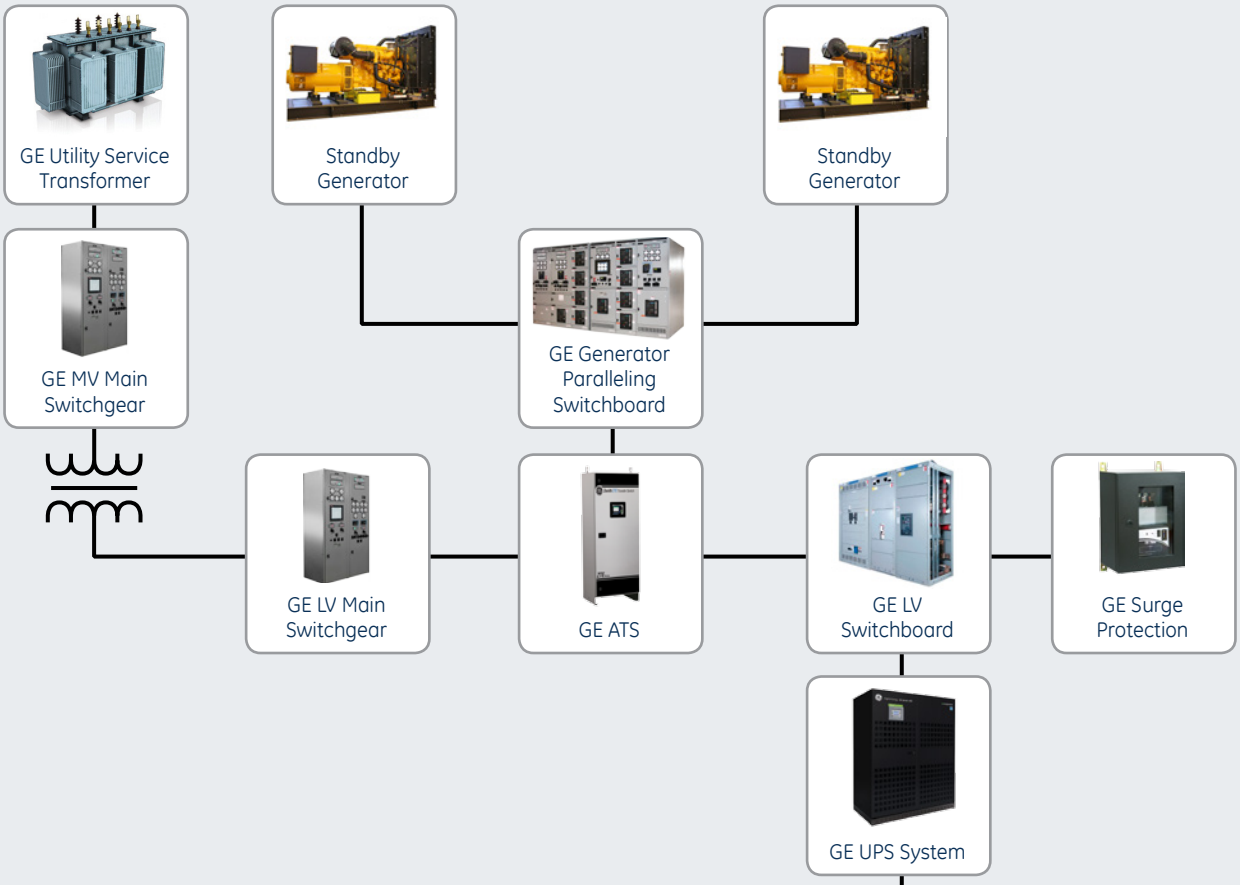
Numerous critical power products and services can be utilized to deliver reliable datacenter infrastructure support, solid project management and outstanding site service solutions.

Over 15,000 downloadable resources for our customers

GEIndustrial.com/CriticalPower provides customers with access to the latest product and solutions news, downloadable resources and interactive digital tools.

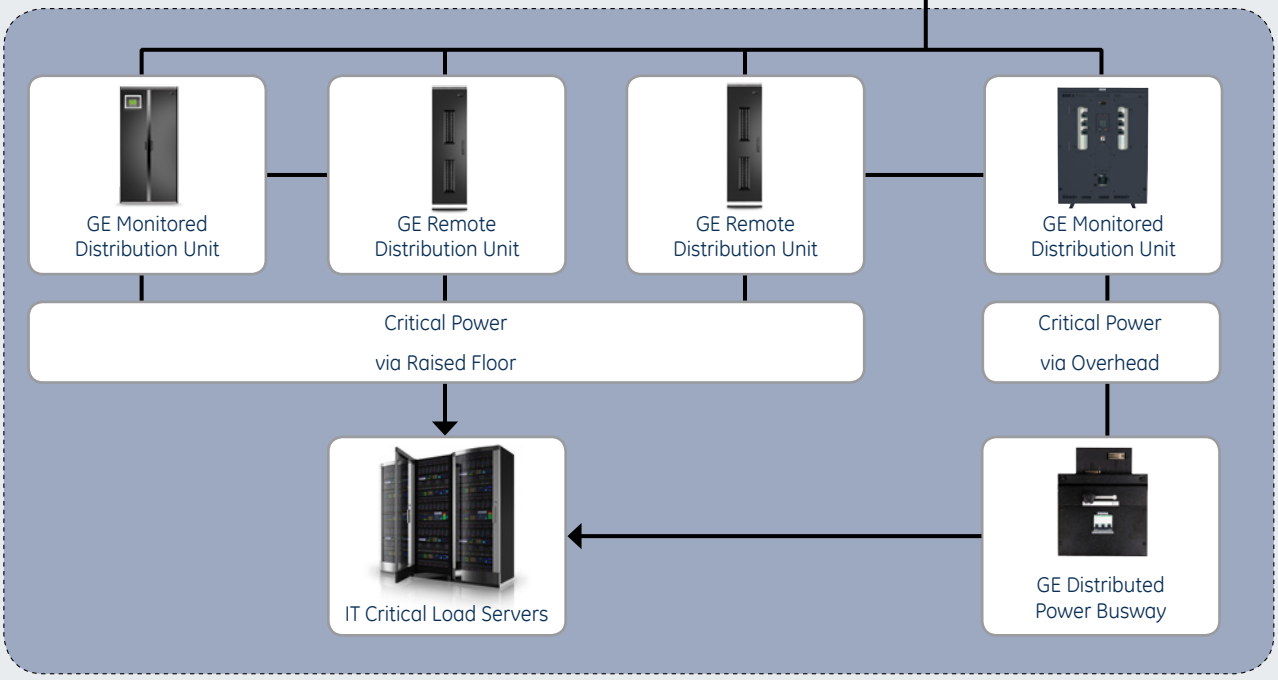
- Access to the entire portfolio of product solutions:
  - Brochures
  - Manuals
  - White Papers
  - Software
  - Drawings
  - Videos
- Multi-language support in Chinese and Spanish
- Industry solution offerings & advanced navigation

End-to-End GE Solutions for Datacenter Power Needs



GE Critical Power Distribution Products

Using Efficient and Flexible Power Distribution to the Critical Load



Series DPB Busway

Busway systems have been available for years. Most systems applied to the datacenter are adaptations of industrial or commercial systems that have not been designed for critical power loads. Now GE has engineered a robust, elegant bus system designed specifically for critical power and datacenter installations.

The Series DPB offers a complete line of fully compatible, continuous opening plug-in busway with all the required fittings to complete your job.

The Series DPB is a flexible, easy to install, highly-efficient structured busway that safely distributes power for any critical power, industrial or commercial application. The busway is a continuous plug-in style rail rated at 160–800 amps with plated copper conductor and contacts.

System installations are performed quickly and easily. Our rugged, yet lightweight busway system design allows for easy handling and installation, with up to a 60% savings in time and labor over competitive cable and conduit methods of installations.

Technology And Construction

The Series DPB Busway has a unique, inherently safe, yet open and accessible design that meets the IP2X - finger-safe safety standards. Tap Off Units can be located anywhere on the run, reducing cabling, and improving the functionality and aesthetics of your system. The oversized bus bars provide superior voltage drop characteristics. The extruded aluminum housing is a solid, one-piece design, with no welds or bolts, which reduces weight, improves the ground path and enhances stability and strength while minimizing EMI of the system.

Our technology incorporates one of the most unique section-to-section joints available today. Our patented cam-action connection method assures you a secure, thermally-efficient, maintenance-free connection. Our design delivers minimal resistance and minimal voltage drops across the connection. And by utilizing 12 foot sections of bus versus the traditional 10 foot, two joint connections for every 100' of run can be eliminated.

Hassle-Free Continuous Run Design

The Series DPB Busway open channel design provides the installer and end-user the greatest flexibility on the market today. With no predetermined tap off points, you can place distribution as needed directly over your loads. The total system enhances the workability of the installation as well as improving the analysis of direct loads. With our integrated communications system, you can monitor individual loads remotely, improve visibility of critical loads and precisely monitor thermal activity on the system or the room.

Design Features

Rugged & Compact

The Series DPB Busway structured bus system is a rugged, yet compact system that eliminates any need for floor space, maximizing your server installation area.

Our unique technology integrates power and communication in a single run, enhancing load communications and reducing the space required compared to multiple cable and conduit runs.

Construction & Finish

The Series DPB Busway system housing is created from a single piece aluminum extrusion with a black anodized finish, which enhances the dissipation of heat along the bus, reducing any hot spot concentrations.

The insulation used in the busway system is manufactured with a Class H (220) rated (150°C / 302°F) material. The insulation wraps around each bus bar, giving perfect separation from phase-to-phase and phase-to-ground while enhancing the short circuit rating.

Plating

To improve system conductivity and reduce resistance, the busway is only available with nickel-plated copper bus bars. This proven system improves the overall contact surface, reducing surface to surface resistance and resisting corrosion in high humidity environments.

Integral Ground Path

The Series DPB Busway incorporates an integral ground system – a feature of its extruded, one-piece aluminum housing. By utilizing the housing design for the grounding system, we ensure the path, improve the capacity and encase the complete system.

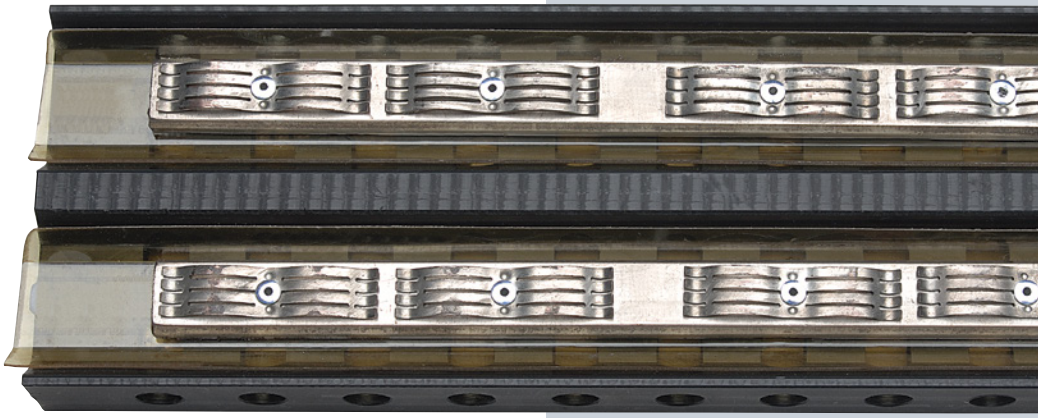
Short Circuit Strength

The Series DPB Busway system's unique design for low voltage distribution from 160-800 amps achieves an AIC rating for unprotected bus at up to 42,000 RMS symmetrical. Our testing was completed and certified by an independent third-party.

Voltage Drop

The Series DPB Busway incorporates a low-loss design, generating one of the lowest voltage drop ratings in the industry.

Low resistance is a key design criterion for power quality equipment in the critical power and data markets.



Typical Busway Connector between Rail Sections

Designed for the Datacenter Market

From preliminary concept to final installation, you can depend on GE's Series DPB Distributed Power Busway.

The Series DPB design improves your installation, enhances system flexibility and helps ensure the uninterrupted operation of your critical electrical system.

The Series DPB is tested and certified by ETL to the following standards: UL857 and IEC 60439-2.

Reliability

Tested at up to 200% of rating - built to last.

Traceability

Clearly defined distribution with zero footprint allows for easy visible tracing of circuits.

Re-Configurability

Move it, re-use it, add to it or change direction – all this without any waste and all with only minor disruption.

Load-Specific

Tap Off Units are completely configurable to meet your load demands and specific load requirements, including monitoring.

Configurable

Lay it out, change your mind, move an aisle – no problem – everything is easier with a distributed bus system.

Low Heat Source

Reduced power concentration within the busway system enables distributed heat dissipation.

Tap Off Units

Continuous bus allows for distribution of power tap off points across the busway rail, with tap offs added or removed at any time. (Proper safety procedure should always be used when working on live components.)

Visual Installation Indicators

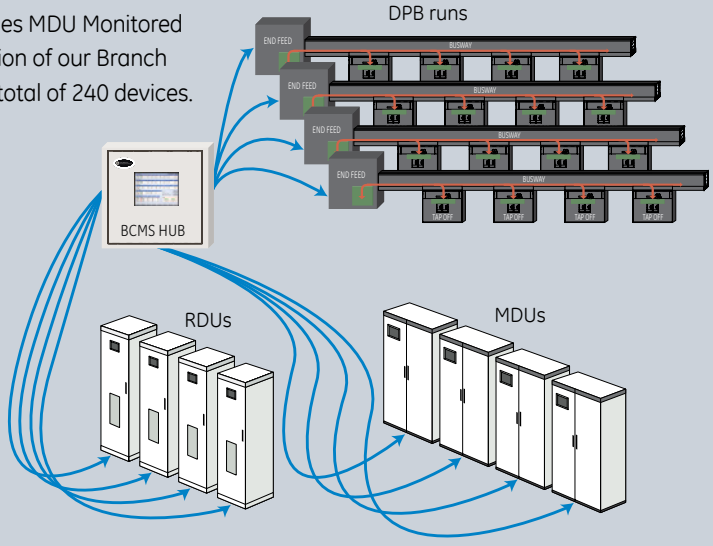
Our system is designed so that there are visible installation features which allow you to check that your configuration is securely installed prior to start-up.

Tap-Off Unit with Branch Circuit Monitoring

Communications

Optional integrated communication provides all the features used in our Series MDU Monitored Distribution Units or Series RDU Remote Distribution Units, including integration of our Branch Circuit Monitoring System (BCMS) Hub, which can collect power data from a total of 240 devices.

The DPB Busway Local Display can be utilized on installations using our busway system only. This 7" touchscreen can collect power data from a total of 96 devices.



Technical Specifications

SPECIFICATIONS	SERIES DPB BUSWAY NOTATIONS	SYSTEM RATINGS					
Ampacity System	Six specific design options with the most common ampacity	160	225	250	400	600	800
Protection	Finger-safe indoor rated systems	IP2X					
Rated Voltage	All systems are rated at 208/480V; tap off units will determine actual system voltage	208/480V					
Rated Short Circuit Capacity	Tested and rated at 480V to 22-42 kAIC depending on amperage	22 kAIC			22 kAIC*	42 kAIC	
Conductor Type	All conductors and contact points are plated copper	CU					
Frequency Rating		50/60 Hz					
Testing Criteria	ETL certified to UL rating for busway systems	UL 857					
IEC Rated	ETL certified to IEC rating for busway systems	60439.2					
System Weight per Foot	Straight sections only	6.8 lbs			9.6 lbs	14.3 lbs	18.6 lbs
Support Distance	Max. on centers; all elbows, cross and tee come with built-in supporting hardware	10' centers			8' centers	5' centers	5' centers

* 42 kAIC up to 208V

COMPONENT	SERIES DPB BUSWAY NOTATIONS	SYSTEM RATINGS					
		160	225	250	400	600	800
Straight Lengths	All sections shipped with coupling on one end	20', 12', 10', 6', 5' and 3' Sections 20 ft. length (160-400A only) ; 600-800A (10 ft. max length)					
Elbows	Elbows come standard with consistently aligned neutral phasing; cross neutral phasing is available on request	Left Right Down Cross					
Tees	Tee fittings will come standard with consistently aligned neutral phasing; cross neutral phasing is available on request	Yes					
Cross or X	Cross fittings will come standard with consistently aligned neutral phasing; cross neutral phasing is available on request (special)	Yes					
End Feed Units	Feed boxes are used to bring power to the bus system; variations are available	Right End Left End Center Dual A&B					
Hangers	Hangers are for universal mounting with various support hardware	Top rail mount Side rail mount					
Tap Off Boxes	Tap off units can be mounted at any position along the busrail. Tap off units are configurable with many variations of breakers, receptacles and corded connections available. Variations are available.	GE circuit breakers; 100A max. Multiple communication available					
Communications	A dedicated communication channel within the busway enclosure can monitor each tap off device	Yes (optional)					

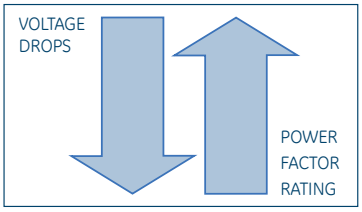
MONITORING	SERIES DPB BUSWAY NOTATIONS	SYSTEM RATINGS	
		LOCAL MONITOR	BCMS HUB
End Feeds	Number of end feeds that can be addressed	Up to 6	Variable
Tap Off Boxes	Number of tap off boxes that can be addressed	Up to 15 per end feed	Variable
Total Devices	Total number of addressable devices	96	240
Reporting	Real-time reporting	No	Yes
Display Size	Diagonal measurement of display	7" Touchscreen	10.4" Touchscreen

Distributed Power Busway Designed for the Datacenter Market

Recycle

GE's Series DPB Busway gives you a highly recyclable and configurable system installation in your facility. From the simplest component to the most complex electrical infrastructure, PDI can help you at the beginning and the end of your project.

Energy Efficient



- Distributed bus has less voltage drop then conventional wiring methods, allowing for more efficient use of energy consumption.
- Distributed bus eliminates energy-wasting hot spots from the datacenter due to electrical cable congestion.
- Distributed bus reduces the footprint allocated to electrical systems in your facility, allowing you to make power infrastructure sizing more accurate.
- Distributed bus enhances your power factor rating due to the low line-to-line voltage loss.

Safe

NON-TOXIC

All components of the Series DPB Busway are strictly made in accordance with all standards to eliminate any toxicity in case of a fire in your facility.

NON-PROPAGATING

If a fire occurs in your facility, the busway is self-extinguishing and will not propagate the flame.

Intelligent Monitoring

- Communications channel is integrated into busrail
- Communication runs to all distribution power
- High level data accumulation
- Complete integrated communications control
- Multiple local and remote monitoring display options

BCMS Hub
Monitors up to
240 Devices

Local Display Monitors
up to 96 Devices

imagination at work

GE
Critical Power

Customer Service Support

Toll-Free: +1 800 637 1738

US-Based Customer Service

Answered Live 24/7

GEIndustrial.com/CriticalPower

DEA-570, Rev. 2/13