

IEM is the largest independent full-line manufacturer of electrical distribution equipment in North America





Tradition. Technology. Innovation.



"Today, IEM has expanded beyond Silicon Valley to supply specialized electrical equipment throughout the U.S. and Canada. Responsiveness, engineering and quality remain the key to maintaining a loyal group of satisfied customers. At IEM, tradition and technology still drive innovation."



For over 60 years, IEM has delivered innovative electrical distribution products to meet the escalating needs of growth industries.

Based in the heart of Silicon Valley, IEM has been solving power distribution challenges for Hewlett-Packard, Apple, and dozens of high tech pioneers since they were start-ups. These companies realized that IEM products were superior to any the multi-nationals could offer and that a faster, more flexible manufacturing system could provide them with the electrical equipment they needed in time to meet their demanding power requirements.

Whether the system is custom design or standard configuration, IEM has the experience and expertise to meet the most challenging projects.



- Quality Products
- Flexible Solutions
- Custom Design and Engineering
- Responsive Service
- Parallel Manufacturing Process
- Over 60 Years Experience
- ISO 9001 Certified



Panelboards

A wide variety of components can be integrated into IEM panelboards including surge suppression equipment, custom metering, receptacles, and more.

- Voltage: Up to 600Vac, 250Vdc maximum
- Ampacity: 100A to 600A
- 65kA at 480V
- UL listed
- Single phase and three phase
- Vertically mounted main and sub-feed circuit breakers
- Up to 84 circuits in one panel
- Interiors available in plated copper or aluminum bus



Switchboards can be custom designed or utilize a standard configuration to meet specific dimensional and electrical requirements. Circuit breakers and fusible switches can be group or individually mounted.

- Voltage: Up to 600V maximum
- Ampacity: 400A to 12000A maximum bus rating
- 65 kAIC standard bus bracing (100 or 200kAIC optional)
- Switchboard ratings through 12000A, 200kAIC up to 480V, 100kAIC up to 600V
- Front, rear, and side accessibility
- Devices can be individually (vertically) or group (panel/horizontally) mounted
- UL Listed; Type 1 or 3R NEMA enclosures
- UL891 and NEMA PB-2

Low Voltage Switchgear

Designed to meet custom indoor or outdoor requirements. Meets applicable ANSI and UL1558 standards. Allows the use of popular power circuit breakers, mounted in fixed or drawout configuration.

- Voltage: 240V to 600V
- Ampacity: 800A to 5000A
- Up to 200kA at 480V and up to 100kA at 600V
- Available in NEMA 1 and NEMA 3R outdoor enclosures
- UL 1066 circuit breaker
- Through the door breaker operation
- Circuit breakers are available in various levels of interrupting ratings from 42–200 kA up to 480 volts and 100kA up to 600V



Medium Voltage Switchgear Metal-Clad/Metal-Enclosed

Available with vacuum circuit breakers and load interrupter switches in the 5kV, 15kV, and 27kV classes. Metal-clad and Metal-enclosed exceeding all ANSI, IEEE, and NEMA standards for indoor or outdoor installations.

- Voltage: 2400V to 27kV
- Ampacity: 600A to 3000A
- Optimal component selection includes any commercially available vacuum circuit breakers from industry leading manufacturers
- Rear access for load and incoming connections
- · Compartmentalized construction with breaker compartment for each device
- One-high or two-high construction
- Indoor or outdoor applications

Unit Substations

Designed for industrial applications to convert distribution voltages to utilization voltages. Easy interface with both primary and secondary switchgear. Outdoor or indoor. Primary voltage from 38kV, secondary voltage > 5kV.

- Primary Air terminal chamber, vacuum circuit breaker or load interrupter switch to 27kV
- Transformer Any commercially available transformer
- Secondary Vacuum circuit breaker or load interrupter switches, UL 891 or UL 1558 switchgear
- Maximum flexibility with wide range of components and ratings to meet application specifics
- Indoor or outdoor assemblies/construction
- Configures to any commercially available transformer by leading manufacturers

Paralleling Switchgear and **Control Systems**

Designed and manufactured to deliver full control of customconfigured power generation systems. They integrate all facets of metering, protection, communication and controls to deliver peak performance, system reliability and operating economy.

- Prime power
- Emergency standby
- Distributed generation systems
- Intrinsic system features Load priority controls
- PLC integrations
- Remote monitoring communications
- UL and CSA listed; Meets ANSI, IEEE, and NEMA standards













38kV Medium Voltage Metal-Clad Switchgear

Now available in the 38kV class in indoor, outdoor non-walk-in, and outdoor walk-in enclosures; we offer optional component selection including different choices for protective relays, metering devices and PLC monitoring for specific applications.

- Voltage: 38kV
- Ampacity: 1200A, 2000A
- Rated voltage withstand (BIL): 150, 170kV peak
- Breaker interrupter ratings: Up to 40kA
- Dimensions: 42" W x 122" D x 95" H
- Advanced vacuum circuit breaker
- Rear access for load and incoming connections

Testing/Industry Standards

- IEEE C37.20.2
- CSA C22.2 No. 31-M89
- EEMAC G8-3.2
- ANSI IEEE C37.04, C37.06, C37.09

Custom Assemblies

From Marine Substations to Emergency Fused Coordination Panels, we design products for our customers that increase power system capacity and improve the reliability, stability and flexibility of power delivery.

- Emergency fused coordination
- panelsMarina substations
- Walk-in enclosures
- Generator cable tap boxes



VESTA-AR Medium Voltage Metal-Clad Arc-Resistant Switchgear

Vesta-AR medium voltage metal-clad, arc-resistant switchgear is designed to meet the needs of customers who demand the highest quality power distribution assembly with the smallest footprint in the industry.

Vesta's plenum design redirects dangerous arc flash energy away from operating personnel, front-facing current transformers simplify maintenance, and magnetically actuated breakers operate up to 100K times, greatly reducing the need for service. In all, over a dozen key features were built into this revolutionary new switchgear.

- Rated voltage: 5-15kV; 95kV BIL
- Current: 600-2000A; 31.5kA
- Dimensions / 1200A: 24" x 96" x 60"
- Dimensions / 2000A: 30" x 96" x 72"
 Magnetically actuated breaker up to 100,000 operations
- Full front accessibility
- Draw out breaker, PT, CT & CPT

Front Accessible, Space-Saving Solution

Typical LV Switchgear



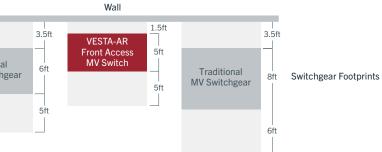
Telegauge – Remote Systems Monitoring

Telegauge[™] is an end-to-end monitoring and trending system that communicates with a wide range of devices, meters, and equipment, providing data locally or over internet in a format easy to use for facility managers and technicians via any web connection extending to today's technology of mobile devices.

Telegauge is the most versatile and customizable monitoring system available on the market today. Users are able to effectively monitor and control the health of their facility with customized tools to store and export data for reporting, alarming and trending.



- Shortest breaker pole spacing between phases
- Infrared viewing ports
- Front and rear viewing windows
- Epoxy insulated bus bar as standard
- Plenum design incorporated into structural configuration No additional height requirement
- UL & cUL listed; Type 2A and 2B in accordance with ANSI/IEEE standards





IEM Vancouver Industrial Electric Mfg. (Canada) Inc.



Industrial Electric Mfg. (Canada) Inc. was formed in 2007 to be the Canadian sales and service center for IEM USA. The Vancouver facility allows Canadian

customers access to the full complement of electrical distribution products and services provided by IEM USA including design consulting and manufacturing, with local sales support for the Canadian market.

To meet the diverse requirements of Canadian specifications and prevailing electrical standards, our Vancouver facility employs highly skilled and educated senior-level individuals who have years of practical experience in the Canadian power generation industry. Familiarity, depth of knowledge and a clear understanding of the needs of the customer are the key elements that brings to the market place.

Located in a 40,000 square-foot manufacturing facility in Langley, B.C., IEM Canada plays an integral part in the overall engineering design and management of its projects, working closely with the factory, customers and consultants throughout the life a project.

IEM Canada specializes in paralleling switchgear and control system design. From system conception to site installation and commissioning, count on the experience, integrity and flexibility of IEM to help with your switchgear equipment requirements.











Industrial Power Systems,

An IEM Company

For over 30 years, Industrial Power Systems, Inc. has been providing integrated solutions for power control systems and marine power switchboard controls. IPS specializes in complex and innovative applications where custom design and engineering are a requirement. IPS has consistently proven to provide solutions to the most challenging projects in the industry.



At IPS there are no standard products, just standard solutions.

Formed in 1981, IPS has designed and built thousands of control panels covering a broad electrical spectrum through 15kV. A new 86,000 square-foot facility has allowed us to expand our capabilities and technologies to continue to provide customer-specific solutions with the highest quality products and services in the industry today.

IPS product and service offering:

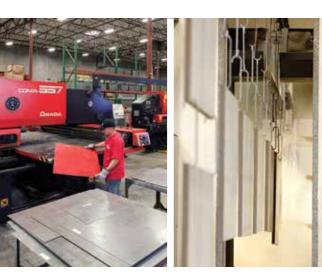
- Low and Medium Voltage Paralleling Switchgear
- Marine Switchboards and Controls
- Advanced Industrial Controls
- Systems Monitoring Technology
- Field Service

IPS is qualified to build products that meet or exceed the standards of all major electrical regulatory bodies and associations including EGSA, IEEE, NEMA, NEC, IEC, UL and ANSI for land applications; ABS, USCG, Bureau Veritas, Lloyd's Register, and IEEE for marine applications. We offer product listed under UL 1558 & UL 891 for low voltage switchgear and UL 508 for industrial motor controls.



Out-of-the box thinking and a flexible manufacturing process enable IEM to meet some of the most challenging electrical distribution problems.

IEM's unique manufacturing process moves the development of all phases along in parallel, allowing for possible changes, easy integration and shorter cycles. This flexibility enables IEM to handle projects that call for standard equipment and those that present unique requirements or a challenging time frame.



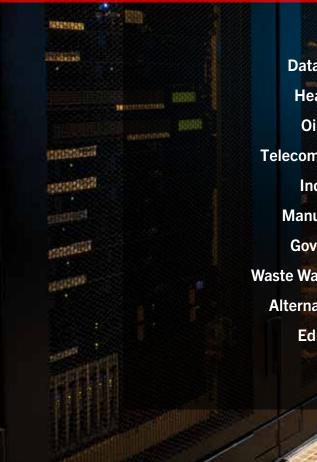
- Full customization and design flexibility
- Component and metering selection options
- Superior enclosures
- Fully rated bus based on density ratings
- Custom powder coat paint line
- All equipment tested to industry standards
- UL/CSA listed; meets ANSI, IEEE, and NEMA standards
- OSHPD seismic certification





Almost every business or structure relies on electrical power, so as different as projects can be in various industries, the basics remain the same – provide efficient, reliable power and controls at a minimal cost of operation. The approach is innovative and flexible and sets IEM apart from standard equipment manufacturers.

IEM Delivers Electrical Distribution Solutions



Industry standard low voltage switchgear



Data Centers Healthcare Oil & Gas Telecommunications Industrial Manufacturing Government Waste Water Treatment Alternative Energy Education

Industrial Electric Mfg.™

IEM is the largest independent full-line manufacturer of electrical distribution and power quality equipment in the U.S. For over 60 years, IEM has delivered customer-specific solutions to meet the ever changing power requirements of growth industries in North America. IEM has expanded beyond Silicon Valley with facilities in Jacksonville, FL and Vancouver, BC.

An experienced engineering staff and one of the most flexible design and manufacturing systems in the industry set IEM apart from standard product manufacturers. At IEM, tradition and technology still drive innovation.



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