

Modular Power Distribution

Scalable to 277 kVA, 208 – 480 V

Scalable and Efficient Three-phase Power Distribution



Easily implement ultra-high efficiency and scalability for three-phase power distribution in demanding, business-critical applications.

- Modular and scalable
- Minimized downtime caused by moves, add-ons, and changes
- High-density distribution in a sleek NetShelter™ enclosure
- Multiple transformer rating choices (208 V, 480/208 V, 600/208 V, and 480/415 V) in 300mm and 600mm enclosures
- Factory-assembled Power Distribution Modules with breaker position monitoring
- Rack-based for agility and aesthetics
- Network manageable via Web interface, SNMP, and Modbus
- Compatible with StruxureWare™ Data Center Expert

Features and Benefits

Bring scalability and ultra-high efficiency to power distribution

The Schneider Electric™ Modular Power Distribution line is the world's first fully scalable three-phase power distribution system. Our Modular Power Distribution products provide cost-effective high levels of availability, and enable toolless addition of circuits and cord-sets.

Up to 72 poles of three-phase power are distributed to the load by scalable power distribution modules (PDMs). These factory-assembled and tested PDMs allow you to easily adjust to changes in demand: data center growth or consolidation, or IT equipment upgrades that increase power density.

Through the innovative use of autotransformer technology in the 300 mm 266 kVA Modular Power Distribution Unit design, a tenfold increase in efficiency yields greater density, reduced floor space, and much lower heat impact on today's power-hungry data center. Use of higher distribution voltage also brings smaller diameter cord-sets, further reducing first costs.

The 600 mm 144 and 175 kVA Modular Power Distribution Units support both low- and high-density applications. Highly efficient, noise-reducing isolation transformers support 208 or 415 V outputs.

For applications where no transformer is required, a 300 mm, 144 or 277 kVA Modular Remote Power Panel (RPP) or a 5U, 72 kVA Modular Rack Distribution Panel provide the modularity, scalability, and efficiency modern data centers require.

The Modular Power Distribution family delivers the highest efficiency power distribution with the lowest footprint impact to your data center. The 5U, 300 mm, and 600 mm PDUs in the Modular Power Distribution family minimize the floor space required for high availability power distribution solutions, while accommodating the power transformation needs of your site.



30 A, 120 V PDM



20 A, 240 V PDM



5U Modular RDP, 72 kVA



20 A, 120 V PDM

Modular Power Distribution

Availability

- Factory-assembled and tested power distribution modules
- Self-diagnosing modules
- Toolless module replacement
- Positive locking mechanisms for PDMs reduce risk of accidental disconnection

Manageability

- Output metering and branch current/circuit monitoring included
- Embedded network management
- Remote access over HTTP(s), Telnet, SSH, and SNMP
- Local access at PowerView™ display interface
- Configurable alarm notifications
- StruxureWare Data Center Expert compatible

Approvals

- UL 60950 Listed
- ULc CSA 60950-1

Options

- Power Distribution Modules (Contact APC or your APC reseller for details about the Power Distribution Modules available in your region)

Typical Applications

- Small/medium/large data centers
- High-density zones of data centers

Optional Support and Service

- Start-up service
- Preventive maintenance
- On-site warranty extension
- Advantage plans

Modular Power Distribution Features

Modular Power Distribution is a solution comprised of a Modular RPP or Modular PDU and one or more Power Distribution Modules (PDMs):

Modular PDU or RPP

The Modular PDU or RPP is the source of amperage for the distribution, housing the power backplane, the main circuit monitoring bus, and the support structure for the PDMs. Each Modular PDU or RPP shares the same basic design, which enables simple installation for any Distribution Modules into any Modular PDU or RPP of common voltage.

Power Distribution Modules

Each PDM consists of an industry standard circuit breaker, branch current monitoring (BCM), output cable, and connector plug combined into a factory assembled and tested module that feeds power to IT racks.

1 Backplane with standard outlets

Standardized connectors in the backplane enable quick addition of new circuits, minimizing downtime.

2 Integrated Monitoring Solution

While the PowerView display provides information locally at the PDU, a Network Management Card relays vital information to the monitoring platform of choice, simplifying the task of monitoring power usage and enabling remote control of the system through a Web interface, StruxureWare Data Center Expert, or your building management system.

3 Efficient transformer technologies

Choose the power distribution unit that matches your application's needs. Efficient power usage is a feature of the autotransformer and isolation transformer options deployed by Schneider Electric Modular PDUs, reducing both your power bill and the heat penalty to existing cooling systems.

4 Add circuits in less than 10 minutes

Automatic recognition of the module type, ampacity, and cord length by the PDU simplifies load balancing and circuit addition.

5 Single-phase and Three-phase Power Distribution Modules

A latching module houses a standard circuit breaker, current transformers, and position sensors. The entire assembly is attached to a pre-terminated cord-set with multiple length options; each module is programmed to know the length of its cable.

6 Locking connectors improve availability

Connector features — including a positive locking mechanism, complete isolation at all touch-points, and robust interoperability — enable standardization across all corporate locations.



Modular Power Distribution Options

StruxureWare for Data Centers Software Suite

In the data center environment, our Modular Power Distribution Units are fully managed through StruxureWare for Data Centers software, an integrated suite of data center infrastructure management (DCIM) applications. It enables businesses to prosper by managing their data centers across multiple domains, providing actionable intelligence for an ideal balance of high availability and peak efficiency throughout the entire data center life cycle. StruxureWare software applications and suites are a key element of Schneider Electric EcoStruxure™ integrated hardware and software system architecture — a system designed for intelligent energy management.



A Comprehensive Portfolio of Services

Schneider Electric Critical Power & Cooling Services (CPCS) provides the expertise, services, and support you need for your building, industry, power, or data center infrastructure. Our world-class life cycle services offer a smart way to install and maintain your critical applications, ensuring your systems are always running at peak performance.



Technical Specifications

	PDPM72F-5U Modular Rack Distribution Panel	PDPM144F Modular Remote Power Panel	PDPM277H Modular Remote Power Panel	PDPM288G6H Modular PDU with Auto-transformer	PDPM150G6F Modular PDU with Isolation Transformer	PDPM150L6F Modular PDU with Isolation Transformer	PDPM288G6H Modular PDU with Isolation Transformer
Input*							
Voltage (nominal)	208 Y/120 V	208 Y/120 V	415 Y/240 V	480 Y/277 V	480 V Delta	600 V Delta	480 V Delta
Input frequency	50/60 Hz	50/60 Hz	50/60 Hz	60 Hz	60 Hz	60 Hz	60 Hz
Wiring	3W + N + G	3W + N + G	3W + N + G	3W + N + G	3W + G + GEC	3W + G + GEC	3W + G + GEC
Max. continuous current	200 A	400 A	400 A	320 A	180 A	150 A	214 A
Input wiring location	Top	Top or bottom	Top or bottom	Top	Top**	Top**	Top**
Max. main input conductor size	250 MCM	500 MCM	500 MCM	500 MCM	500 MCM	300 MCM	500 MCM
Suggested upstream breaker	200 A	400 A	400 A	400 A	225 A	200 A	300 A
Output							
Full load rating	72 kVA	144 kVA	277 kVA	266 kVA	144 kVA	144 kVA	175 kVA
Voltage (nominal)	208 Y/120 V	208 Y/120 V	415 Y/240 V	415 Y/240 V	208 Y/120 V	208 Y/120 V	415 Y/240 V
Max. continuous current	200 A	400 A	400 A	370 A	400 A	400 A	243 A
Max. Power Dist. Modules	6	24	24	24	24	24	24
Max. Power Dist. Poles	18	72	72	72	72	72	72
Physical							
Dimensions (H x W x D)	229 x 457 x 737 mm (9 x 18 x 29 in.)	2,002 x 300 x 1,077 mm (78.8 x 11.8 x 42.4 in.)	2,002 x 300 x 1,072 mm (78.8 x 11.8 x 42.4 in.)	2,005 x 300 x 1,095 mm (78.9 x 11.8 x 43.1 in.)	2,007 x 600 x 1,069 mm (79.0 x 23.6 x 42.1 in.)	2,007 x 600 x 1,069 mm (79.0 x 23.6 x 42.1 in.)	2,007 x 600 x 1,069 mm (79.0 x 23.6 x 42.1 in.)
Shipping Dimensions (H x W x D)	406 x 610 x 889 mm (16.5 x 24 x 36 in.)	2,248 x 851 x 1,206 mm (88.5 x 33.5 x 47.5 in.)	2,248 x 853 x 1,207 mm (88.5 x 33.58 x 47.5 in.)	2,155 x 746 x 1,181 mm (84.8 x 29.4 x 46.45 in.)	2,153 x 1,016 x 1,219 mm (84.8 x 40 x 48.0 in.)	2,153 x 1,016 x 1,219 mm (84.8 x 40 x 48.0 in.)	2,153 x 1,016 x 1,219 mm (84.8 x 40 x 48.0 in.)
Weight without Power Distribution Modules	23.5 kg (52 lb.)	160 kg (352 lb.)	160 kg (352 lb.)	500 kg (1,100 lb.)	836 kg (1,843 lb.)	881 kg (1,942 lb.)	941 kg (2,074 lb.)
Shipping weight	34 kg (75 lb.)	182.27 kg (401 lb.)	182.68 kg (401.9 lb.)	513 kg (1,130 lb.)	882 kg (1,944 lb.)	927 kg (2,043 lb.)	987 kg (2,175 lb.)
Compliance	UL Listed, cUL	UL Listed, cUL, OSHPD	UL Listed, cUL, OSHPD	UL Listed, cUL, OSHPD	UL Listed, cUL, OSHPD	UL Listed, cUL, OSHPD	UL Listed, cUL, OSHPD

*For detailed information about breaker ratings, wiring ratings, or, if applicable, transformer ratings, see the Installation manual.

**Bottom feed supported with optional Bottom Feed Side Car.

Preliminary – subject to change without notice