

Modular Power Distribution

Scalable to 277 kVA, 400 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
- Minimize downtime caused by moves, add-ons, and changes
- High-density distribution in a sleek 300 mm enclosure or 5U shelf
- Factory-assembled Power Distribution Modules with breaker position monitoring
- Rack-based for agility and aesthetics
- No rear access required
- 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.

Seamlessly integrating into today's state-of-the-art data center designs, the APC Modular Remote Power Panel (RPP) is a true modular system. 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 for easy adjustment to changes in demand, such as data center growth or consolidation, or IT equipment upgrades that increase power density.

Requiring only 5U of rack space, the Modular Rack Distribution Panel distributes up to 138 kW while addressing power distribution needs in the world's smallest footprint for power distribution units. This model offers 18 pole positions of power distribution and can be mounted in an existing IT rack to save space or purchased pre-installed in a NetShelter™ SX enclosure.

The Modular Power Distribution family delivers the highest efficiency power distribution in a mere 300 mm enclosure or 5U shelf, while greatly decreasing the floor-space required for high-availability applications. Other features include power distribution modules providing branch current and breaker positioning monitoring, pre-terminated cord-sets, and quick status LEDs.



16 A PDM with RCD



32 A PDM with RCD



5U Modular RDP, 138 kVA



32 A 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

- CE

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. This simplifies 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 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.
- 4 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.
- 5 Residual Current Device (RCD)**
Further enhancing safety, select Power Distribution Modules include protection from leakage current.
- 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

	PDPM138-5U	PDPM277H
Input*		
Voltage (nominal)	400 V 3ph	400 V/230 V 3ph
Input frequency	50/60 Hz	50/60 Hz
Wiring	3W + N + PE	3W + N + PE
Current	200 A	400 A
Input wiring location	Top	Top or bottom
Max. main input conductor size	250 mcm	500 mcm
Suggested max. upstream breaker	200 A	400 A
Output		
Full load rating	138 kW	277 kW
Voltage (nominal)	230 V/400 V 3ph	230 V/400 V 3ph
Max. continuous current	200 A	400 A
Max. Power Dist. Modules	6	24
Max. Power Dist. Poles	18	72
Physical		
Dimensions (H x W x D)	229 x 457 x 737 mm	2005 x 300 x 1095 mm
Shipping Dimensions (H x W x D)	406 x 610 x 889 mm	2155 x 746 x 1181
Weight without Power Distribution Modules	23.5 kg	160 kg
Shipping Weight	34 kg	173kg
Compliance	CE	CE, VDE

*For detailed information about breaker ratings or wiring ratings, see the Installation manual.
Preliminary – subject to change without notice