# **Modular Power Distribution**

Scalable to 277 kW, 400 V

Safe, Efficient, Scalable 3-Phase Power Distribution











## Agile, safe, efficient power distribution for IT equipment in any size data center or high density zone

- Modular and scalable
- Moves, add-ons, and changes are accomplished without downtime or hot work
- High density distribution in a sleek 12-inch enclosure or 5U shelf
- Power distribution modules include cord set, circuit breaker, branch circuit monitoring, breaker position monitoring and preterminated connector
- Low TCO
- Rack-based for agility and aesthetics
- No rear access required



### **Features and Benefits**

# The safest method to bring ultra-high efficiency & scalability to power distribution

The APC™ Modular Power Distribution line is the world's first fully scalable and hot-swappable 3-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 without scheduling outages or conducting dangerous hot work.

Seamlessly integrating into today's state-of-the-art data center designs, the APC Modular Remote Power Panel is a true modular system. Comprised of a CE-listed "touch-safe" backplane with up to 72 poles of 3-phase power and hot-swappable power distribution modules, this architecture can scale power distribution circuits to easily adjust 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 138kW 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<sup>™</sup> SX enclosure.

The Modular Power Distribution family delivers the highest efficiency power distribution in a mere 300-millimeter 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.

#### What is Modular Power Distribution?

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

#### Modular RPP

The source of amperage for the distribution, housing the hot-pluggable power backplane, the main circuit monitoring bus, and the support structure for the PDMs. Each Modular RPP shares the same basic design, which enables simple plug-and-play for any Distribution Modules into any Modular 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 hot-swappable module that feeds power to IT racks.

# Modular Power Distribution

#### **Availability**

Hot-scalable power distribution modules

Self-diagnosing, field-replaceable modules

Toolless module replacement

#### Manageability

Output metering and branch current/circuit monitoring included

Embedded network management

Remote access over HTTP, Telnet, SNMP

Local access at PowerView display interface

Configurable alarm notifications

StruxureWare<sup>™</sup> Central compatible

#### Safety

Touch-safe backplane

No hot work

Isolated touch points

Positive locking mechanisms for PDMs

### **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**

1 Touch-safe backplane

Shields users from dangerous voltages; standardized connectors in the backplane enable users to add a new circuit without hot work or shutdowns

- 2 Integrated Monitoring Solution
  While the legendary PowerView display provides information locally at the PDU, a Network
  Management Card relays vital information to the monitoring platform of choice
- Add circuits in less than ten minutes
  Automatic recognition of the module type,
  ampacity, and cord length by the PDU simplifies
  load balancing and circuit addition
- 4 1-Phase and 3-Phase Power Distribution Modules

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

- Further enhancing safety, select Power
  Distribution Modules include protection from leakage current
- 6 Locking connectors improve availability and safety

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



# **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	160 A continuous (200 A with 100% rated breaker)	400 A
Input wiring location	Тор	Top or bottom
KAIC	10	10
Max. main input conductor size	250 MCM	500 MCM
Suggested maximum upstream breaker	200 A	400 A
Output		
Full load rating	138 kW	277 kW
V nom.	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	2002 x 300 x 1072 mm
Shipping Dimensions (H x W x D)	406 x 610 x 889 mm	2248 x 853 x 1207 mm
Weight without Power Distribution Modules	23.5 kg	160 kg
Shipping Weight	34 kg	182.68 kg
Compliance	CE	CE, VDE

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