

**288 KVA** Power Distribution Unit

# InfraStruXure® Modular Power Distribution

## Ultra-High Efficiency

Power Distribution for Data Centers

Power Distribution Unit  
Remote Power Panel

# 288 KVA

**< 1/2 Rack** Only 12" Wide



**High Performance  
3 Phase Modular,  
Scalable Power  
Distribution with  
Industry Leading  
Efficiency, Capacity  
and Performance for  
Medium to Large Data  
Centers and Mission  
Critical Environments**

- Innovative Autotransformer Technology
- 10X Efficiency over legacy distribution methods
- Modular and Scalable
- The safest method to ensure moves adds and changes are accomplished without down time or hot-work
- High Density distribution in a sleek 12" wide cabinet design
  - PDU - 266kW
  - RPP - 277kW
- Low first cost, low TCO
- Circuit breaker modules include cord-set, branch circuit monitoring, breaker position monitoring, and pre-terminated IEC Connector
- Rack based for agility and aesthetics



## InfraStruXure® Modular Power Distribution

**Safe, Efficient, Scalable, 3-Phase Power Distribution with industry leading availability, agility and performance for any size data center or high density power zone**

The APC InfraStruXure® Modular Power Distribution line is the world's first fully scalable and hot-swap 3-Phase power distribution system. Through the innovative use of autotransformer technology, a tenfold increase in efficiency yields greater density, reduced floor space, and much lower heat impact on today's power hungry datacenter. A fully scalable power distribution system now provides cost effective high levels of availability, while enabling 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 InfraStruXure PDU and RPP are true modular systems. Comprised of a UL listed "touch-safe" backplane with 72 poles of 3-phase power and hot-swappable circuit breaker modules, all engineered into the worlds smallest footprint for power distribution units, this architecture can scale power distribution circuits as demand grows or as new equipment is required to be provisioned without the headache of scheduling outages, or risking hot-work.



266kW Modular PDU



3Phase, 1Phase Circuit breaker modules; C-19 Splitter assembly

The Modular PDU delivers the highest efficiency while also greatly decreasing the floor-space required for high availability applications. With industry leading power density, the InfraStruXure® Modular PDU can distribute 11.5 kW per circuit while only consuming 20 Amperes. This innovative approach for utilization of all available electricity means more power per whip at the same amperage. Other features include circuit breaker modules providing branch current and breaker positioning monitoring, pre-terminated cord-sets, and quick status LEDs. Use of higher distribution voltage also brings smaller diameter cord-sets, further reducing first costs.

**The safest method to bring ultra-high efficiency and scalability to power distribution for demanding business critical applications**

**APC**

# 288 KVA Power Distribution Unit

Modular Power Distribution >> 11.5 KW per Whip !

## Features & Benefits



### 1 266kW output in a sleek, 300mm Half-rack design

Slimmest, most space-conscious design translates to a 60% floor-space savings over traditional PDUs, with up to 80% greater power output - the same form-factor rack houses the transformerless RPP, and serves 277kW at 400V

### 2 Innovative Autotransformer Technology brings a tenfold increase in efficiency

At one tenth the loss of traditional dual winding isolation transformers, the electric usage saves money, and the heat penalty to existing cooling systems is greatly reduced.

### 3 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.

### 4 20A 3-Phase Circuit Breaker Modules

A hot-swap module houses the standard 3Phase 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 it's whip is!

### 5 IEC Connectors improve availability and safety

A time tested approach in other parts of the world, positive locking mechanism, complete isolation at all touch-points, and robust interoperability enables standardization across all corporate locations.

### 6 20A 1-Phase Circuit Breaker Modules

The same hot swap module technology is terminated with 3 individual 1Phase IEC connectors, perfect to power InRow RC modular cooling units.

### 7 IEC connector to triple C19 "Calamari Plug"

Another industry first from APC - directly power multiple high density rack-based network gear and servers. Bypassing a rack PDU to provide up to 20A per phase, directly attaching servers to the PDU provides even better visibility into power usage at the server level.

### 8 Traditional Rack PDU with C13/C19 outlets

Not every application is strictly C-19 based, so the AP7557NA basic rack PDU provides the same flexibility and features as all our rack PDUs.

**APC**<sup>®</sup>

# Technical Characteristics

## 288 KVA Power Distribution Unit North America

## Europe Version

Enclosure Electrical Ratings	US Version	Euro Version	
Input voltage	<b>480Y/277 V</b>	400Y/230 V	
Wiring	<b>3W + N + G</b>	<b>3W + N + G</b>	
Conductors	5	5	
Input current	320	400	
KAIC	65	10	
Input wiring - phase (min.)	<b>Cu : 1x 500 MCM (rated at 380A); Cu : 2x 4/0 MCM (rated at 230A) Al : 2x 250 MCM (rated at 205A)</b>		
Input wiring - ground (min.)	<b>Cu : #3 (400A rating); Cu : #6 if 2x (200A rating) Al : #4 if 2x (200A rating)</b>		
Input wiring - GEC (min.)	<b>Cu : 1/0 if 1x 500 MCM; #2 if 2x 4/0 MCM Al : #2 if 2x 250 MCM</b>	N/A	
Input phase terminals - MCCB	<b>Mechanical lug : 1 X #2 awg - 500MCM</b>	<b>Mechanical lug : 1 x 600MCM / 2 x 250MCM</b>	
Input terminals - N, G & GEC	<b>Mechanical lug : 1 x 600MCM / 2 x 250MCM</b>		
Input wiring location	<b>Top</b>	<b>Top or Bottom</b>	
Cable voltage rating	<b>600</b>	<b>600</b>	
Cable temperature rating (degrees C)	<b>90</b>		
Input conduit size (North America)	<b>Cu : 3" min. (1x 500 MCM); Cu : 2-12/" min. (2x 4/0 MCM) Al : 2-1/2" min. (2x 250 MCM)</b>		
Suggested upstream breaker	<b>320A (100% rated), 400A (80% rated)</b>	<b>400A (100% rated), 500A (80% rated)</b>	
System output to distribution	<b>415Y/240 V</b>	<b>400Y/230 V</b>	
Conductors	<b>3W + N + G</b>		
Transformer size, type	<b>288kVA, Autotransformer</b>	<b>Transformerless</b>	
Transformer input voltage, current	<b>480Y/277 V, 346A</b>		
Transformer output voltage, current	<b>415Y/240 V, 400A</b>		
Transformer Thermal sensing	<b>180C (NC)</b>		
Transformer Weight	<b>506 lbs</b>		
Transformer Efficiency (@35% load)	<b>99.81%</b>		
Transformer Frequency	<b>60hZ</b>		
Transformer noise	<b>&lt;50db @ 1m</b>		
<b>Circuit Breaker Modules</b>	<b>20A 3 Phase</b>		<b>20A 1 Phase</b>
Breaker type, rating, protection	<b>20A</b>		<b>16A</b>
Input current (nominal)	<b>20A</b>	<b>16A</b>	
Output voltage	<b>240V</b>	<b>240V</b>	
Connector type	<b>IEC 309 5wire</b>	<b>IEC 309 3 wire</b>	
Cord-set Lengths (CM)	<b>80,140, 200, 260, 320, 380, 440, 500, 560, 620, 680, 740, 800, 860, 920, 980, 1080</b>	<b>260, 380, 500 680, 860, 1040 1680, 1680, 1680 Triple 1 phase outputs</b>	

