

Flexible, intelligent, and reliable high-density power distribution for large data centers



# The Power Distribution Unit for large data centers

The Schneider Electric 400 & 500kVA Power Distribution Units (PDU) are reliable, scalable, and intelligent high-density power distribution units ideal for large data centers. They offer flexible configuration, with factory installed and tested Square D breaker panels configured to meet the unique needs of your site. The compartmental design requires front access only for operation and maintenance. The easily accessible 7-inch display interface and optional energy meters provide the level of monitoring your site requires, and the PDU is EcoStruxure-enabled, for anytime, anywhere monitoring.

#### Reliable

Our PDU is engineered by the makers of legendary SquareD circuit breakers and panel boards, incorporating over 100 years of leadership in electrical distribution. The PDU is supplied with the flagship I-Line Panel Board and your choice of PowerPact breakers.

#### Scalable

This PDU meets the demanding scalability needs of any large data center, delivering maximum flexibility with branch breaker choices as the data center needs change. The versatile I-Line Panel Board is not limited to the branch breaker choices you made on day 1 or day N.

#### Intelligent

The PDU can be monitored with our EcoStruxure™ IT software, cloud-based or on-premise data center infrastructure management applications that offer end-to-end power management from UPS to rack. The software enables remote monitoring of power and breaker status data to intelligently manage power in a large data center.

#### Easy to install and service

The clean layout of the PDU offers ease of installation and serviceability. Thoughtful compartmental design and top and bottom cable entry bring the best to your data center layout.

#### Low ownership costs

- Space-saving, high-density system that is easy to install
- Highly energy efficient DOE-compliant transformers minimize losses and save operating cost

#### Typical applications -

- Large data centers
- Colocation facilities
- · Cloud service providers



## Features and Benefits that make a difference

Quickly install and easily service the PDU, with input, output, electronic, and power distribution compartments that isolate each installation, operation, or maintenance task:



Choose the energy management, energy metering, and power quality monitoring strategy that meets your business needs:



#### **Options**

- Main input switch or breaker
- Main output breaker
- A wide range of 250 A, 400 A and 600 A branch breaker options from Schneider Electric's PowerPact J- and L-frame breaker series
- Advanced metering

## Monitoring and management

#### Monitoring and management software

### Cloud-enabled remote monitoring with EcoStruxure™ Asset Advisor

EcoStruxure™ Asset Advisor monitors and protects your critical equipment, providing 24/7 visibility through live data, smart alarming, and data-driven insights on the health of your connected assets directly to your smartphone. When you upgrade to EcoStruxure™ Asset Advisor, remote troubleshooting is provided by the experts monitoring your connected assets, 24/7.

- Remote Service: Increase your data center's uptime with intelligent 24/7 monitoring and remote troubleshooting service
- Analytics: Gain insight into how well your data center runs —
  receive recommendations and data-driven intelligence through the
  EcoStruxure™ IT cloud platform
- Smartphone App: Stay connected to your data center with live data and alarms on your smartphone app

https://schneider-electric.com/asset-advisor

#### More information

Contact your Schneider Electric representative for more details or visit our website for more information on:

Cloud-based software with EcoStruxure™ IT Datacenter

Management as a Service (DMaaS) is our cloud-based software
solution and is ideal for users wanting a low maintenance, convenient,
and intelligent solution that provides benchmarks to determine areas
of improvement. Get global visibility into your infrastructure, enjoy
the benefit of big data analytics to understand how well you data
center runs in real time and in the future, and receive data-driven
recommendations.

On-premise software with StruxureWare™ Data Center Infrastructure Management (DCIM). For users preferring on-premises solutions, the EcoStruxure™ IT family includes StruxureWare for Data Centers applications suite. It is ideal for businesses that need to manage their data centers across multiple domains. It provides actionable intelligence for an optimal balance of high availability and peak efficiency throughout the entire data center life cycle.

https://www.schneider-electric.com/en/work/solutions/for-business/data-centers-and-networks/cloud-based-dcim-software-dmaas/



### Services

#### Installation services

A Schneider Electric-certified installation and commissioning of your solution ensures your equipment is properly and safely configured for optimal performance and reliability.

#### Maintenance services

Schneider Electric offers a comprehensive services portfolio designed to ensure your mission-critical applications receive the proper care and maintenance they need to operate at optimal levels — at all times. Maintenance services include Preventive Maintenance Service Plans and response-time upgrades where available.

#### Service plans / onsite extended warranty

Flexible service packages that offer hassle-free system maintenance to improve uptime at a predictable cost. These packages provide your system with the care it needs to operate most efficiently while minimizing downtime.



## Technical specifications

	100171	500114
	400kVA	500kVA
Input specifications		
Nominal voltage	480V (600V as custom option)	
Nominal current	481 A	601 A
Input frequency	60Hz	
Maximum short circuit level	65kA	
Output Specifications		
Nominal voltage	Aluminum Transformer Model: 400V or 208V Copper Transformer Model: 208V	
Nominal current	577 A at 400 V; 1110 A at 208 V	722 A at 400 V; 1388 A at 208 V
Output frequency	60Hz	
Output current protection	250-600A	
Branch breakers	250, 400, 600	
Environmental		
Operating temperature	-10 to 40 °C (14 to 104 °F)	
Storage Temperature	-25 to 55 °C (-13 to 131 °F)	
Efficiency at full (100%) load	Aluminum: 98.62% Copper: 98.76%	Aluminum: 98.56% Copper: 98.74%
Physical		
Dimensions (HxWxD)	2043.7 x 1524 x 1092.2mm (80.46x60x43 in)	
Weight	Aluminum: 2118.28 kg (4670 lb) Copper: 2168.17 kg (4780 lb)	Aluminum: 2218.17 kg (4890 lb) Copper: 2268 kg (5000 lb)
Connections		
Input/output cable entry	Top or bottom	
Network connectivity options	Modbus TCP/IP, Ethernet, RS485, SNMP, BACnet through additional gateway, StruxureWare for Data Center Operation	
Compliance		
Safety	UL 60950-1, 2nd Edition (Information Technology Equipment) CSA C22.2 No. 60950-1-07, 2nd Edition (Information Technology Equipment) UL 891, 11th Edition (Switchboard) C22.2 No. 244-05, First Edition (Switchboard)	
FCC	FCC Part 15, Subpart B, Class A	
Marking	cULus	
Performance	Transformer DOE2016 / NRCan	
Seismic preapproval	OSHPD	
Warranty	1 year	

#### About Schneider Electric

Schneider Electric is leading the Digital Transformation of Energy Management and Automation in Homes, Buildings, Data Centers, Infrastructure and Industries.

With global presence in over 100 countries, Schneider is the undisputable leader in Power Management — Medium Voltage, Low Voltage and Secure Power, and in Automation Systems. We provide integrated efficiency solutions, combining energy, automation, and software.

In our global Ecosystem, we collaborate with the largest Partner, Integrator, and Developer Community on our Open Platform to deliver real-time control and operational efficiency.

We believe that great people and partners make Schneider a great company and that our commitment to Innovation, Diversity, and Sustainability ensures that Life Is On everywhere, for everyone and at every moment.



To learn more about the EcoStruxure Ready Power Distribution Units, EcoStruxure IT cloud-based DCIM and EcoStruxure Asset Advisor 24x7 Digital Monitoring Services, contact your Schneider Electric representative or visit schneider-electric.com/itpowerdistribution.

schneider-electric.com/itpowerdistribution

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