Modulon DPH Series UPS

Three-phase, 50-300/500/600 kVA, 400 Vac

The world's highest power density providing ultimate MW power protection with leading power performance and superior reliability

In this IT intensive world with heavy data traffic driven by cloud, 4G/5G and media streaming applications, IT managers are facing the challenges of increasing rack power density and limited data center space. Delta's innovative modular UPS technologies provide the answer to customers' demands for high power density, high power performance, and ultimate availability. The brand-new Delta Modulon DPH series UPS 50-300/500/600 kVA achieves the industry's leading power density of 50 kW per module, offering the smallest footprint and best space utilization. The Modulon DPH Series UPS is the ideal modular power protection for MW data centers to achieve total cost of ownership (TCO) optimization.

Excellent Power Performance

- The industry's leading power density per module at 50 kW in a 3U space, and the smallest footprint for 500 kVA in a single rack and 600 kVA in two racks, that achieves the best utilization compared with its peers
- High AC-AC efficiency up to 96.5% and ECO mode to 99% provide marked energy cost savings
- Green mode featuring a load aggregation function optimizes system efficiency

Ultimate Availability

- Fully modularized design and hot-swappable key modules ensure Mean Time To Repair (MTTR) close to zero without downtime risk
- Redundant components and dual CAN bus delivers highest system availability and avoids single point of failure
- Modular UPS grows with your business by parallel expansion up to 8 units for 4.8 MVA of total power capacity

High Manageability

- User-friendly 10” color touchscreen enables easy local UPS management
- Environment information such as security, water, fire, and temperature can be integrated into the UPS for easy monitoring via the LCD of the UPS
- If the UPS is equipped with an external battery management system, the battery information can be integrated into the UPS and monitored via the LCD of the UPS

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Technical Specifications

Model		DPH-300K	DPH-500K	DPH-600K
Power Rating		100/150/200/250/300 kVA 100/150/200/250/300 kW	300/350/400/450/500 kVA 300/350/400/450/450 kW	500/550/600 kVA 500/550/600 kW
Frame Size		300 kW	450 kW	600 kW
Parallel Configuration		Up to 8 units		
INPUT				
Nominal Voltage		380/400/415 Vac, 3P4W+PE		
Voltage Range		305-478 Vac (100% load); 229-305 (with derating to 70-100% load)		
Frequency		40-70 Hz		
Total Harmonic Distortion (THDi)		< 3%(1)		
Power Factor		> 0.99 (100% load)		
OUTPUT				
Nominal Voltage		380/400/415 Vac, 3P4W+PE		
Voltage Regulation		±1%		
Frequency		50/60 ± 0.05 Hz		
Total Harmonic Distortion (THDv)		≤ 1% (linear load); ≤ 5% (non-linear load)		
Power Factor		1(2)		
Overload Capability		≤ 125%: 10 mins; ≤ 150%: 1 min; > 150%: 1 sec		
Current Crest Ratio		3:1		
EFFICIENCY				
Online Mode		Up to 96.5%		
ECO Mode		Up to 99%		
BATTERY				
Battery Type		VRLA/Lithium-ion		
Nominal Voltage		±240 Vdc		
Quantity		30(3)-46 pcs (Configuratble, 12V VRLA battery)		
Maximum Charge Current		90 A	135 A	180 A
COMMUNICATION INTERFACE				
Display		10-inch color touchscreen		
Port		Modbus (RS-485), Smart slot, REPO, Input dry contact x4, Ouput dry contact x6, External battery temperature detection x4, External switch/breaker status dry contact x4, BMS (RS-485), EMS/Console (RJ45), Ethernet port		
Protocols		SNMP, Modbus RTU, Modbus TCP/IP, HTTP(S), SNTP, SMTP, Syslog, BOOTP, DHCP		
PHYSICAL				
Dimensions (W x D x H)		600 x 1100 x 2000 mm		1200 x 1100 x 2000 mm
Net Weight	UPS System	311 kg	317 kg	605 kg
	Per Power Module	36 kg		
ENVIRONMENT				
Operating Temperature		0 to 40 °C		
Humidity		0-95% (non-condensing)		
Altitude		0-2000 m (derating 1%/100m from 1001-2000 m)		
Storage Temperature		-20 to +70 °C		
CONFORMANCE				
Safety		CE, UKCA		
EMC		IEC 62040-2		
Performance		IEC 62040-3		
Sustainability		RoHS, REACH		
FEATURES				
Standard		Sequential start for generator, Backfeed protection, Burn-in test without load bank, Cold start function, Frequency conversion, Failure prediction		
Optional		Software integration with Delta Lithium-ion battery BMS		

(1) When input vTHD < 1%

(2) 0.9 for the DPH-500K model

(3) 30-34 batteries must be set up by authorized personnel, with load derating required.

All specifications are subject to change without prior notice.

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