

Delta UPS – Modulon Family

DPH Series, Three Phase
50 - 300/500/600 kVA

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 50kW 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 3U space, and the smallest footprint for 500 kVA in a single rack and 600 kVA in two racks, to achieve the best utilization compared with its peers
- High AC-AC efficiency up to 96.5 % and ECO mode to 99 % results in 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 touch screen 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



IT



Telecom



Industrial



Transportation



Financial



Government



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Technical Specification

Model	DPH-300K	DPH-500K	DPH-600K	
Power Rating	kVA	50-300	50-500 ⁽¹⁾	50-600
	kW	50-300	50-450	50-600
	Power Module Rating	50 kW		
	Power Module Quantity	Up to 6 units	Up to 9 units	Up to 12 units
Input	Nominal Voltage	220/380 Vac, 230/400 Vac, 240/415 Vac (3-phase, 4-wire + G)		
	Voltage Range	305-477 Vac (full load), 229-305 Vac (70~100 % load)		
	Current Harmonic Distortion	< 3 % ⁽²⁾		
	Power Factor	> 0.99		
	Frequency Range	40~70 Hz		
Output	Voltage	220/380 Vac, 230/400 Vac, 240/415 Vac (3-phase, 4-wire + G)		
	Voltage Harmonic Distortion	≤ 0.5 % (linear load)		
	Voltage Regulation	± 1 % (static)		
	Frequency	50/60 ± 0.05 Hz		
	Overload Capability	≤ 125 %: 10 minutes; ≤ 150 %: 1 minute; > 150 %: 1 second		
Display	10" color touch screen			
Interface	Standard	RS232 x1, Parallel port x4, USB type A x2, USB type B x1, MODBUS x1, Smart slot x1, REPO x1, EPO x1, Input dry contact x4, Output dry contact x6, External battery temperature detection x4, External switch/breaker status dry contact x4, BMS (RJ45) x1, Ethernet x1		
	Optional	Relay I/O card, Battery cabinet temperature sensor cable		
Conformance	Safety	CE		
Efficiency	AC-AC	Up to 96.5 %		
	ECO Mode	99 %		
Battery	Nominal Voltage	±240 Vdc (default, ±180 Vdc to ±276 Vdc configurable)		
	Charge Voltage	±272 V (adjustable from 204 to 312 V)		
	Protection of Battery Deep Discharge	Yes		
Environment	Operating Temperature	0 to 40 °C		
	Relative Humidity	0~90 % (non-condensing)		
	Audible Noise (at one meter)	< 75 dB	< 80 dB	< 85 dB
	IP Protection	IP20		
Others	Parallel Redundancy and Expansion	Module and system redundancy; Maximum 8 units		
	Emergency Power Off	Remote (default) and local (optional)		
	Battery Start	Yes		
Physical	Dimensions (W x D x H)	600 x 1100 x 2000 mm		1200 x 1100 x 2000 mm
	Weight: UPS System (without power modules)	311 kg	317 kg	605 kg
	Weight: 50 kW Power Module (optional)	36 kg		

(1) The power module's rating is adjustable to 50 kVA or 55.6 kVA via Modbus. DPH-500K can support 500 kVA / 450 kW with nine 55.6 kVA power modules.

(2) When input vTHD is less than 1 %.

All specifications are subject to change without prior notice.



50 kW in 3U space



User-friendly 10" color touch screen



Fully modularized and hot-swappable design



DPH-300K model is inbuilt with four breakers for easy operation and maintenance



DPH-500/600K model is highly integrated with four built-in switches