## 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' demand for high power density, high power performance, and ultimate availability. The brand-new Delta Modulon DPH series UPS 50-300/500/600kVA 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 50kW in 3U space, and the smallest footprint for 500kVA in a single rack and 600kVA 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% resulting 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 4.8MVA 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









Industrial



Network



Banking



Security



Medical Metro





# Delta UPS - Modulon Family

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

#### **Technical Specification**

Model		DPH 300 System	DPH 500 System	DPH 600 System
Power Rating	kVA	100,150,200,250,300	300,350,400,450,500*	500,550,600
	kW	100,150,200,250,300	300,350,400,450,450	500,550,600
	Power Module Quantity	Up to 6 units	Up to 9 units	Up to 12 units
Input	Nominal Voltage	220/380V, 230/400V, 240/415\	V (3-phase, 4-wire + G)	
	Voltage Range	176 ~ 276 Vac (full load)		
	Current Harmonic Distortion	< 3%**		
	Power Factor	> 0.99		
	Frequency Range	40 ~ 70 Hz		
Output	Voltage	220/380V, 230/400V, 240/415\	V (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 minute ; ≦ 150% :	1 minute; >150%: 1 secon	d
Display		10" color touch screen		
		RS232 x 1, Parallel port x 4, USB type A x 2, USB type B x 1, MODBUS x 1, Smart slot x 1, REPO x 1, EPO x 1, Input dry contact x 4, Output dry contact x 6, External battery temperature dry contact x 4, External switch/breaker status dry contact x 4, BMS (RJ45) x 1, Ethernet x 1		
	Optional	Relay I/O card, Battery cabine	t temperature sensor cable	
Conformance	Safety	CE		
Efficiency	AC-AC Mode	Up to 96.5%		
	ECO Mode	99%		
Battery	Nominal Voltage	±240 Vdc		
	Charge Voltage	±272V (adjustable from 204V	to 312V)	
	Protection of Battery Deep Discharge	Yes		
Environment	Operating Temperature	0 ~ 40℃		
	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 redundand	cy ; Maximum 8 units	
	Emergency Power Off	Remote (default) and local (op	tional)	
	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: 50kW Power Module (optional)	36 kg		

<sup>\*</sup> The power module's power rating is adjustable to either 50kVA or 55.6kVA via touch panel.

All specifications are subject to change without prior notice.



50kW in 3U space



User-friendly 10" color touch screen



Fully modularized and hot-swappable design



DPH 300 system is inbuilt with four breakers for easy operation and maintenance



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



<sup>\*\*</sup> When input vTHD is less than 1%.