### Delta UPS-Ultron Family

HPH Series, Three Phase 20 - 120 kW

### Best-in-class power protection with maximum power and cost efficiency

The Ultron HPH is a true online double-conversion UPS offering the best-in-class combination of maximum available power, unbeatable energy efficiency and superior power performance for small data centers and other mission critical applications. With fully rated power (kVA=kW), the Ultron HPH provides maximum available power without de-rating the UPS. Thanks to the three level IGBT topology for both PFC (power factor correction) and inverter, the Ultron HPH features up to 96% AC-AC efficiency. Delta's advanced digital PFC control also contributes low iTHD < 3% and high input power factor > 0.99 resulting in significant TCO (Total Cost of Ownership) savings. Facilitating increased availability and power performance, the Ultron HPH is an ideal solution for protecting your mission critical operations.

#### **Best-in-Class Power Performance and Efficiency**

- Fully rated power (kVA=kW) for maximum power availability
- · Leading AC-AC efficiency up to 96% saves energy costs
- Low harmonic pollution (iTHD<3%) and high input power factor (>0.99) reduce upstream investment costs

#### Assured Reliability

- · Wide input voltage range allows the UPS to operate in harsh electrical environments and extends battery life
- DSP based technology enables reduction in the number of electronic components to lower failure rate
- · Redundant auxiliary power and fan design\* enhance system reliability

#### **Greater Flexibility**

- A wide choice of configurations, such as N+X redundancy and hot stand-by
- · Adjustable charging current and charging voltage meet different battery configuration requirements
- · Flexible battery configuration optimizes battery investment

#### **Superior Serviceability and Management**

- Front-door battery replacement with hot-swappable battery tray design supports easy and guick replacement without turning the unit off (HPH-B / BN)
- Swappable interior architecture and front access servicing enables quick and easy maintenance\*
- · Multi-connectivity interface supports remote UPS monitoring and management















Medical













Banking

# Delta UPS-Ultron Family

# HPH Series, Three Phase 20 - 120 kW

Model		HPH-20K	HPH-30K	HPH-40K	HPH-60K	HPH-80K	HPH-100K	HPH-120K
		HPH-20K-BN/B	HPH-30K-BN/B	HPH-40K-BN	BN/B			
Power Rating		20KW	30KW	40KW	60KW	80KW	100KW	120KW
Input	Nominal Voltage	220/380 Vac; 230/400 Vac; 240/415 Vac						
	Voltage Range	-20%~20% (full load)			-15%~20% (full load)			
		-40%~20% (70% load)			-40%~20% (70% load)			
	Frequency	50/60Hz +/- 10Hz						
	Power Factor	> 0.99 (full load)						
	Current Harmonic Distortion	< 3%						
Output	Voltage	220/380 Vac; 230/400 Vac; 240/415 Vac			<2% (linear load)			
	Voltage Regulation	±1 %						
	Voltage Harmonic Distortion	< 1.5 % (linear load)						
	Overload Capability	≤105 %: continuous; 106% ~ ≤125%: 10 minutes; 126% ~ ≤150%: 1 minute; >150%: 1 second						
	Frequency	50/60Hz +/- 0.05Hz						
Battery	Туре	Support SMF/VRLA/Tubular/Ni-Cd						
	Quantity	32-50 pcs	32-46 pcs***					
	In-built Charge Current (Max.)	5A	9A	9A	10A	15A	20A	20A
	Typical Backup Time **	15 min	10 min	9.5 min				
Communication		SMART Slot x 1, MINI Slot x 1, Parallel Port x 2, RS232 Port x 1, REPO Port x 1, Charger Detection Port x 1, Input Dry Contact x 2, Output Dry Contact x 6, USB Port x 1*						
Interfaces		Input Dry Contac	t x 2, Output Dry C	ontact x 6, USB	Port x 1*			
Interfaces Conformance	Safety & EMC	Input Dry Contac CE, IEC62040-1,		ontact x 6, USB	Port x 1*			
	Safety & EMC Parallel Redundancy	CE, IEC62040-1,			Port x 1*			
Conformance		CE, IEC62040-1,	IEC602040-2 units in parallel up		Port x 1*			
Conformance	Parallel Redundancy Emergency Power Off	CE, IEC62040-1, Yes, maximum 4	IEC602040-2 units in parallel up		Port x 1*			
Conformance	Parallel Redundancy Emergency Power Off	CE, IEC62040-1, Yes, maximum 4 Yes (local and re	IEC602040-2 units in parallel up			H 40-120K effi	ciency is tested	by TÜV )
Conformance Other Features	Parallel Redundancy Emergency Power Off Maintenance Bypass Switch	CE, IEC62040-1, Yes, maximum 4 Yes (local and re Yes	IEC602040-2 units in parallel up			H 40-120K effi	ciency is tested	by TÜV )
Conformance Other Features	Parallel Redundancy Emergency Power Off Maintenance Bypass Switch Online Mode	CE, IEC62040-1, Yes, maximum 4 Yes (local and re Yes Up to 96%	IEC602040-2 units in parallel up			H 40-120K effi	ciency is tested	by TÜV )
Conformance Other Features Efficiency	Parallel Redundancy Emergency Power Off Maintenance Bypass Switch Online Mode ECO Mode	CE, IEC62040-1, Yes, maximum 4 Yes (local and re Yes Up to 96% Up to 99%	IEC602040-2 units in parallel up mote)			H 40-120K effi	ciency is tested	by TÜV )
Conformance Other Features Efficiency	Parallel Redundancy Emergency Power Off Maintenance Bypass Switch Online Mode ECO Mode Operating Temperature	CE, IEC62040-1, Yes, maximum 4 Yes (local and re Yes Up to 96% Up to 99% 0 ~ 40 °C	IEC602040-2 units in parallel up mote)			H 40-120K effi	ciency is tested	by TÜV )
Conformance Other Features Efficiency	Parallel Redundancy Emergency Power Off Maintenance Bypass Switch Online Mode ECO Mode Operating Temperature Relative Humidity	CE, IEC62040-1, Yes, maximum 4 Yes (local and re Yes Up to 96% Up to 99% 0 ~ 40 °C 5% ~ 95 % (no co	IEC602040-2 units in parallel up mote)		> 96% (HPI	H 40-120K effi	ciency is tested	by TÜV )
Conformance Other Features Efficiency	Parallel Redundancy Emergency Power Off Maintenance Bypass Switch Online Mode ECO Mode Operating Temperature Relative Humidity Audible Noise	CE, IEC62040-1, Yes, maximum 4 Yes (local and re Yes Up to 96% Up to 99% 0 ~ 40 °C 5% ~ 95 % (no co	IEC602040-2 units in parallel up mote)		> 96% (HPI		ciency is tested	by TÜV )
Conformance Other Features Efficiency	Parallel Redundancy Emergency Power Off Maintenance Bypass Switch Online Mode ECO Mode Operating Temperature Relative Humidity Audible Noise	CE, IEC62040-1, Yes, maximum 4 Yes (local and re Yes Up to 96% Up to 99% 0 ~ 40 °C 5% ~ 95 % (no co	IEC602040-2 units in parallel up mote)  ondensing)  < 60 dBA		> 96% (HPI <65 dBA IP20	nal)	ciency is tested	
Conformance Other Features  Efficiency  Environment	Parallel Redundancy Emergency Power Off Maintenance Bypass Switch Online Mode ECO Mode Operating Temperature Relative Humidity Audible Noise Protection Level	CE, IEC62040-1, Yes, maximum 4 Yes (local and re Yes Up to 96% Up to 99% 0 ~ 40 °C 5% ~ 95 % (no co	IEC602040-2 units in parallel up mote)  ondensing)  < 60 dBA		> 96% (HPI <65 dBA IP20 IP21 (option	nal)	,	
Conformance Other Features  Efficiency  Environment	Parallel Redundancy Emergency Power Off Maintenance Bypass Switch Online Mode ECO Mode Operating Temperature Relative Humidity Audible Noise Protection Level  Dimensions (W x D x H)	CE, IEC62040-1, Yes, maximum 4 Yes (local and re Yes Up to 96% Up to 99% 0 ~ 40 °C 5% ~ 95 % (no co	Distriction of the control of the co	to 480 kW	> 96% (HPI <65 dBA IP20 IP21 (option 520 x 800 x	nal) x 1175 mm	520 x 800 x	1760 mm
Conformance Other Features  Efficiency  Environment  Physical	Parallel Redundancy Emergency Power Off Maintenance Bypass Switch Online Mode ECO Mode Operating Temperature Relative Humidity Audible Noise Protection Level  Dimensions (W x D x H) Weight	CE, IEC62040-1, Yes, maximum 4 Yes (local and re Yes Up to 96% Up to 99% 0 ~ 40 °C 5% ~ 95 % (no co < 55 dBA IP20  380 x 800 x 800 t 66.5 Kg	Distriction of the control of the co	to 480 kW	> 96% (HPI <65 dBA IP20 IP21 (option 520 x 800 x	nal) x 1175 mm	520 x 800 x	1760 mm



High power performanc



Control and LCD Display Panel



Swappable interior architecture for quick and easy maintenance



enhances system reliability



Delta offers a full range of UPS solutions from 600 VA to 4000 kVA to fulfill your power security needs.

HPH-B: UPS integrated battery model has batteries inside HPH-BN: UPS integrated battery model has no batteries inside

- \* Applied for models HPH-60/80/100/120K
- \*\* At 70% load with internal battery strings.
- \*\*\* UPS needs de-rating for battery quantity 32-36 pcs. Please contact authorized Delta personnel.

All specifications are subject to change without prior notice.



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2009 Frost & Sullivan Green Excellence Award for Corporate Leadership



To Report Services

Delta's Manufacturing System Certified by ISO 9001 and ISO 14001 Standards



IECQ Certificate of Hazardous Substance Process Management



Delta Ultron HPH 40~120kVA Efficiency is tested by TÜV





Applied for models HPH-20/30/40K

