

The power behind competitiveness

# 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 quick 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



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### 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/B				
Power Rating		20kVA/kW	30kVA/kW	40kVA/kW	60kVA/kW	80kVA/kW	100kVA/kW	120kVA/kW
Input	Nominal Voltage	380/220Vac, 400/230Vac, 415/240Vac (3 phase, 4-wire + G)						
	Voltage Range	300~477 Vac (full load)			332~477 Vac (full load)			
		228~300 Vac (70%~100% load)			228~332 Vac (63%~100% load)			
	Frequency	40~70Hz						
	Power Factor	> 0.99 (full load)						
	Current Harmonic Distortion	< 3%						
Output	Voltage	380/220Vac, 400/230Vac, 415/240Vac (3 phase, 4-wire + G)						
	Voltage Regulation	±1 %						
	Voltage Harmonic Distortion	< 1.5 % (linear load)			<2% (linear load)			
	Overload Capability	≤105 %: continuous; 106% ~ ≤125%: 10 minutes; 126% ~ ≤150%: 1 minute; >150%: 1 second						
	Output Power Factor	1						
	Frequency	50/60Hz +/- 0.05Hz						
Battery	Battery Voltage	240Vdc						
	Type	Support SMF/VRLA/Tubular/Ni-Cd						
	Quantity	32-50 pcs			32-46 pcs***			
	Charge Current (Max.)	5A	9A	9A	10A	15A	20A	20A
	Built-in				20A	20A	40A	40A
	Additional charger board (optional)				20A	20A	40A	40A
	Typical Backup Time **	15 min	10 min	9.5 min				
Communication Interfaces		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*						
Conformance	Safety	CE, RCM						
Other Features	Parallel Redundancy	Up to 4 units						
	Emergency Power Off	Local and remote						
	Maintenance Bypass Switch	Yes						
Efficiency	AC-AC	Up to 96%			> 96% (HPH 40-120K peak efficiency is tested by TÜV)			
	ECO Mode	Up to 99%						
Environment	Operating Temperature	0 ~ 40 °C						
	Relative Humidity	5% ~ 95 % (non-condensing)						
	Audible Noise	< 55 dB	< 60 dB	<65 dB				
Physical	Dimensions (W x D x H)	380 x 800 x 800 mm			520 x 800 x 1175 mm	520 x 800 x 1760 mm		
	Weight	66.5 kg	86.06 kg	86.5 kg	186.5 kg	191 kg	312 kg	312 kg
Physical (BN / B)	Dimensions (W x D x H)	490 x 830 x 1400 mm						
	Weight (with batt.)	365 kg	385 kg					
	Weight (without batt.)	131 kg	162 kg					



High power performance HPH series UPS



Control and LCD Display Panel



Swappable interior architecture for quick and easy maintenance\*



Redundant fan design enhances system reliability\*



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

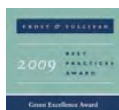
HPH-B: UPS integrated battery model has batteries inside  
 HPH-BN: UPS integrated battery model has no batteries inside

\* 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.



2007~ 2008 Forbes Asia's Fabulous 50



2009 Frost & Sullivan Green Excellence Award for Corporate Leadership



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

