

Rack & Accessories

Greener



Hot Swappable

Fully integrated design and
scalable system architecture

UPS

datacenters

SOLUTIONS

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Smart, modular design for optimising space utilisation

DPH + NH SERIES



Current Automation
POWER SOLUTION PROVIDERS



NH Plus Series

Three Phase, 20-120 kVA



The **Modulon NH Plus series** is Delta's new generation UPS featuring **high efficiency, hot-swappable modular structure** and N+X redundancy. With its industry leading **94% high efficiency**, the NH Plus series delivers remarkably **low total cost** of ownership in terms of both capital expense and operating expense.

- Available from 20 to 480 kVA (4 units x 120 kVA in parallel).
- Redundancy at module and system level.
- Hot-swappable function ensures uninterrupted operations during maintenance.
- Redundant auxiliary power and control circuit ensures higher reliability.
- Inbuilt maintenance and static bypass switch.
- Modular design provides easy maintenance and scalability.
- Multi-language LCD display and LED status indicators.
- Two smart slots and six programmable dry contact outputs.
- Optional external battery cabinet for longer backup time.
- High input and output power factor (I/P pf >0.99; O/P pf up to 0.9) and 94% high efficiency reduce operating costs.

Technical Specifications

Model	NHP-20K	NHP-40K	NHP-60K	NHP-80K	NHP-100K	NHP-120K
Power Rating - kVA	20	40	60	80	100	120
Power Rating - kW*	18	36	54	72	90	108
Input	<i>Nominal Voltage</i>	380/220, 400/230, 415/240 Vac (3 phase, 4-wire + G)				
	<i>Voltage Range</i>	208 ~ 477 Vac (line-line)/120 ~ 276 Vac (line-neutral) **				
	<i>Current Harmonic Distortion</i>	< 3% (full load)				
	<i>Power Factor</i>	> 0.99				
	<i>Frequency</i>	50 or 60 ± 5 Hz				

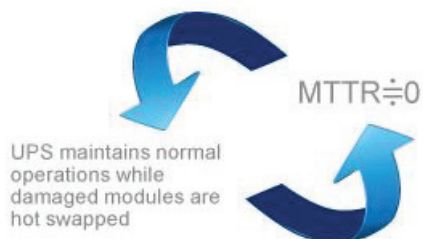
Output

Voltage	380/220, 400/230, 415/240 Vac (3 phase, 4-wire + G)
Voltage Harmonic Distortion	< 3% (linear load)
Voltage Regulation	± 1% (static)
Frequency	50 or 60 Hz
Frequency Regulation	± 0.05 Hz (interior oscillator) ± 5 Hz (synchronized, adjustable in steps of 0.1 Hz)
Overload Capability	≤ 125%: 10 minutes ≤ 150%: 1 minute

POWER

94% high efficiency

Hot-swappable



With the NH Plus's modular structure, when a failure occurs the malfunctioning module is automatically excluded from the system and another takes over to maintain normal operations. You can then hot swap a backup module so the repair time is effectively zero.

Applications: •Data Center •Telecom •Industrial •Network
•Security •Lab •Medical •Metro



Interated power distribution for optimal power management

Three Phase, 25 - 800 kVA/kW

DPH Series

The modular UPS ideal for medium-sized datacenters

Introducing the next generation of **modular uninterruptible power** supply systems (UPS systems) designed for ultimate availability, **excellent performance** and **high efficiency** ideally suited for **medium-sized datacenters**.

Efficiency
AC-AC - 96%
ECO Mode - 99%



Ultimate Availability

Ultimate Availability for Mission Critical Operations



High Scalability

Modularity Designed for Scalability



High Efficiency

Excellent Power Efficiency and Performance



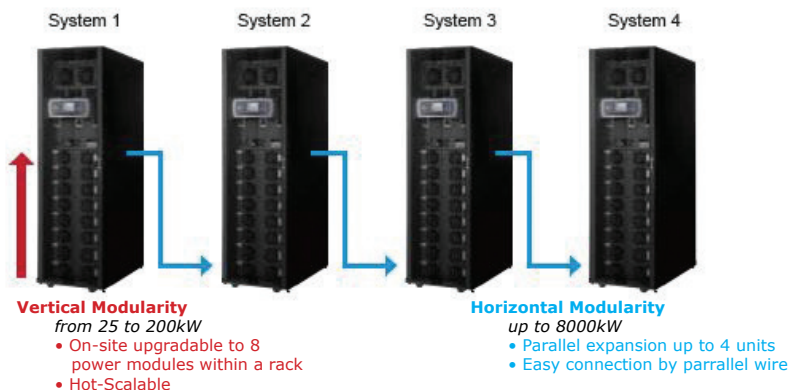
Easy Maintenance

Hot plug and hot swap simplify the maintenance

Mode	DPH
Power Rating	kVA: 25 / 50 / 75 / 100 / 125 / 150 / 175 / 200 kW: 25 / 50 / 75 / 100 / 125 / 150 / 175 / 200
Input	
Nominal Voltage	380/220V, 400/230V, 415/240V (3 phase, 4-wire +G)
Voltage Range	176~276 / 305~477 Vac *
Current Harmonic Distortion	< 3% **
Power Factor	> 0.99
Frequency	50/60 Hz
Output	
Nominal Voltage	380/220V, 400/230V, 415/240V (3 phase, 4-wire +G)
Voltage Range	176~276 / 305~477 Vac *

high scalability
MODULAR

Ultimate Availability



User-friendly Control Interface

Designed for management ease, the Modulon DPH is fully equipped with user-friendly monitoring and controls in various languages. A big graphic LCD screen provides the needed

control for all communication and command options at the tip of your fingers to monitor and control functions on a single page view. Direct event log viewing helps quickly diagnose events without additional hardware requirements. Up to 3,000 event logs can be recorded.

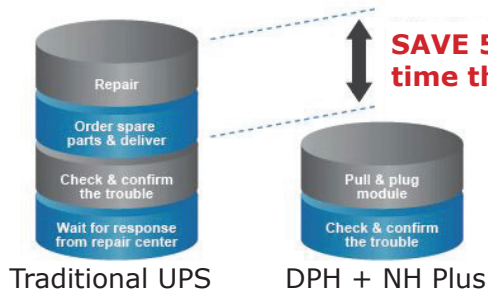


The modular UPS ideal for medium-sized datacenters

NH Plus + DPH series = Easy Maintenance

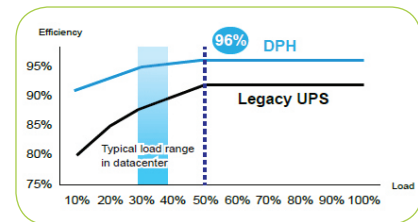
Hot plug and hot swap simplify the maintenance process

The **Modulon DPH & NH Plus hot swappable** features makes best use of a modularity design for **50% faster time of repair** compared to traditional UPS systems. Plug and play modularity also eliminates the risk of second fault occurrence caused by complex failure checking and removing processes. The reliability of maintenance and service is guaranteed, further assuring the system availability.



Flexibility

- Modular design provides easy maintenance and scalability.
- Multi-language LCD display and LED status indicators.
- Two smart slots and six programmable dry contact outputs.
- Optional external battery cabinet for longer backup time.



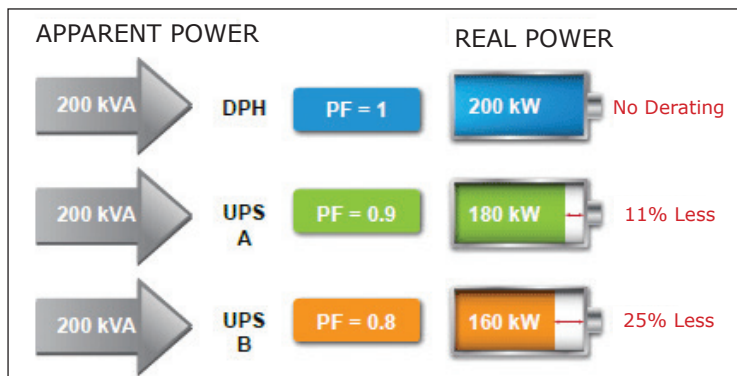
Excellent Power Efficiency and Performance

Excellent power performance and efficiency directly translate into significant reduction of operational costs.

Two key trends have developed in the world of datacenter operations – demand for power and the cost of that power. Today's management is facing growing pressure to optimize performance for sustainability and growth.

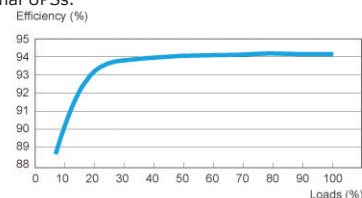
Delta's UPS solutions deliver one of the highest power performance and efficiency ratings available while reducing cost. The Modulon DPH delivers fully rated power (power factor=1, kVA=kW) providing the maximum power capacity to the load. Compared to UPS systems with output of PF=0.8 and PF=0.9, the DPH supplies 25% and 11% more power, respectively. Other than that, the fully rated power factor is supported by a "stronger" inverter design providing better power protection and quality to loads.

Excellent power performance and efficiency lower operation costs significantly. The Modulon DPH combines these benefits to provide high performance, efficient power protection to maximize operational savings for any datacenter.



High Efficiency and Energy Saving

Today's enterprises are searching for energy saving solutions to reduce operation costs. **The NH Plus's patented technology achieves over 90% efficiency, even for loads as low as 15%, and exceeds 94% efficiency with loads over 27%.** The NH Plus's outstanding power efficiency provides users with significant **savings on electricity bills** and a greatly reduced carbon footprint compared with conventional UPSs.



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