



Best Space Utilization



Leading Energy Efficiency



Battery Health Prediction



Ready for Li-ion Batteries

# Delta UPS - Ultron Family DPS Series 300-1200kVA

The Ultimate MW Power Protection with Uncompromising Power Performance and Reliability

# About Delta Group

## Leading expert in power management and thermal management solutions

Delta, founded in 1971, is a global leader in switching power supplies and thermal management products with a thriving portfolio of smart energy-saving systems and solutions in the fields of industrial automation, building automation, telecom power, data center infrastructure, EV charging, renewable energy, energy storage and display, to nurture the development of smart manufacturing and sustainable cities. As a world-class corporate citizen guided by its mission statement, "To provide innovative, clean and energy-efficient solutions for a better tomorrow," Delta leverages its core competence in high-efficiency power electronics and its CSR-embedded business model to address key environmental issues, such as climate change. Delta serves customers through its sales offices, R&D centers and manufacturing facilities spread over close to 200 locations across 5 continents.

**World No. 1** in Switching Power Supplies, DC Brushless Fans and Telecom Power Systems

**176** sales offices and **38** manufacturing facilities worldwide

**8%** of annual sales revenues invested in R&D with over **9,000** engineers in **75** R&D centers worldwide

Awarded **10,119+** patents and received **47** internationally recognized design awards including iF, Reddot, and the Taiwan Excellence awards.

## Worldwide No. 1 supplier of merchant power supplies

The Total Merchant Power Supply Market 2019 Revenue

Ranking	Company Name	Sales (M/USD)
1	Delta Electronics	\$ 5308
2	Schneider Electronic	\$ 3500
3	Vertiv	\$ 2500

Source: Micro-Tech Consultants, 2019

## CSR Honors and Awards

Member of  
**Dow Jones Sustainability Indices**  
Powered by the S&P Global CSA

---

2011 – 2020  
DJSI - World Index  
2018-2020 Industry Leader

**CDP**  
DISCLOSED RESPONSIBILITY ACTION  
**A LIST 2020**  
**CLIMATE**

---

2020  
Climate Change  
Leadership Level

**CDP**  
DISCLOSED RESPONSIBILITY ACTION  
**A LIST 2020**  
**WATER**

---

2020  
Water Security  
Leadership Level

**Sustainability Award**  
Gold Class 2021  
**S&P Global**

---

2021  
Sustainability Award  
Gold Class

# Global Footprint

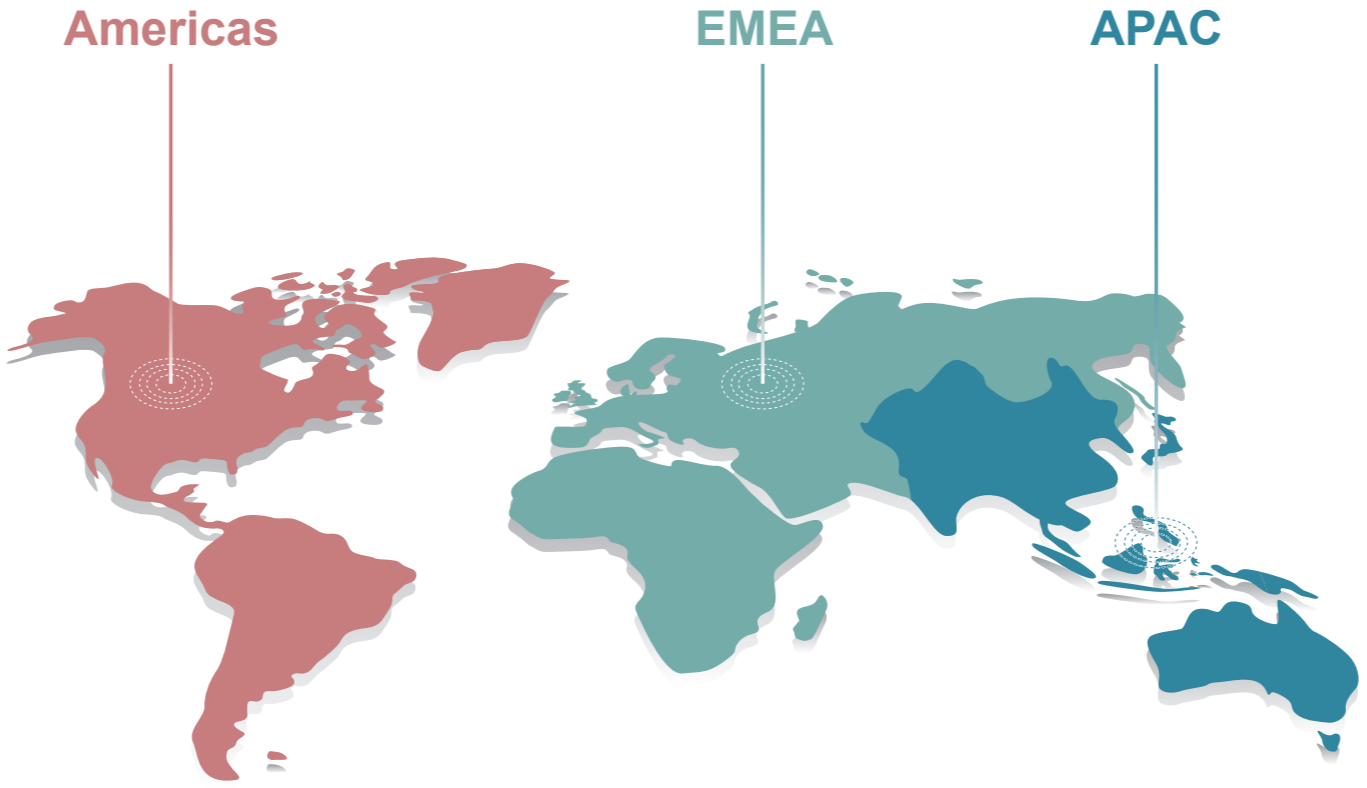
	Asia-Pacific	Americas	EMEA	Total
Sales Offices	107	24	45	176
Plant Sites	31	4	3	38
R&D Centers	52	9	14	75



More information about Delta Group can be found at [www.deltaww.com](http://www.deltaww.com) or [www.deltapowersolutions.com](http://www.deltapowersolutions.com)



# Data Center Footprints



Total Deployment  
Over **1000** MW +



**U.S**  
Power Protection for the "Grab & Go" Shopping Store 1.8 MW



**Russia**  
Government Data Center 1.6 MW



**China**  
Lin Kong Port Data Center 26 MW  
Internet Data Center 5 MW



**Vietnam**  
HTC-ITC, TCCF TIER III-Certified Data Center 750 kW



**Brazil**  
Power Protection for the Largest Private Sector Bank 1.6 MW



**Spain**  
Atos Data Center 200 kW



**Taiwan**  
National Data Center 5.5 MW  
Formosa Plastics Data Center 750kW



**India**  
NetMagic Data Center 22 MW  
Yotta Corp, Colocation 1 MW



**South Africa**  
University Data Center 150 kW



**Netherland**  
Bytesnet, Colocation 6 MW



**Thailand**  
Telecom Data Center 5.2 MW



**Australia**  
Prefabricated Modular Data Center 100MW+

# Ultron DPS Series 300 - 1200kVA

The world's highest power density UPS providing ultimate MW power protection with leading power performance and superior reliability

The dawn of the cloud era went hand-in-hand with the advent of the hyperscale data center. A lot of data moved from on-premise enterprise facilities to the cloud. Delta's superior Ultron DPS series 300 - 1200kVA UPS supports unity output power factor to deliver up to 9.6 MW power capacity to meet the demands of large data centers and colocations that require higher power capacity. The Ultron DPS series guarantees the highest level of system reliability and resiliency by supporting self-detection of key components with a pre-warning function, multi-layered redundancy design, and complete power rating coverage. Moreover, the DPS series supports advanced manageability. Key environment parameters, and event analysis can all be monitored via local 10" LCD monitor and remotely. Along with optional battery management software, the DPS series enables users to achieve predictive maintenance and minimize system downtime, while optimizing the total cost of ownership (TCO).

- 1 Touch panel
- 2 EPO bottom
- 3 Power modules cabinet
- 4 Control system unit
- 5 System STS module
- 6 Input switch
- 7 Bypass switch
- 8 Manual bypass switch
- 9 Output switch
- 10 I/O cabinet



300kVA



1200kVA

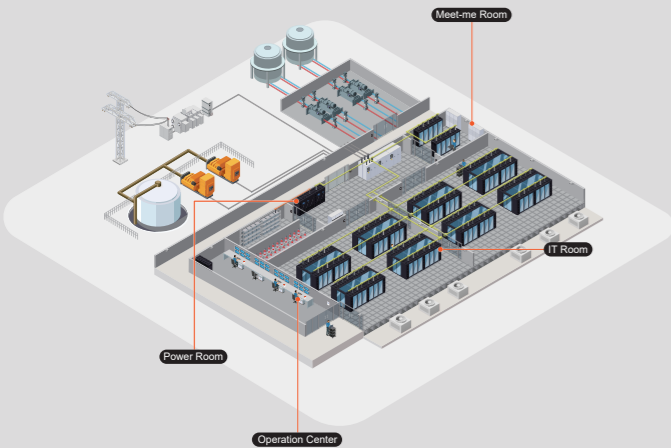


300kVA



1200kVA

## Applications for the Ultron DPS Series



The MW UPS Answering the Demands of Large Data Centers and Colocations

**Highest Power Density at the MW Scale**

Reserves more space for critical equipment

**Sophisticated Manageability**

Integrates related data for easy access via LCD monitor

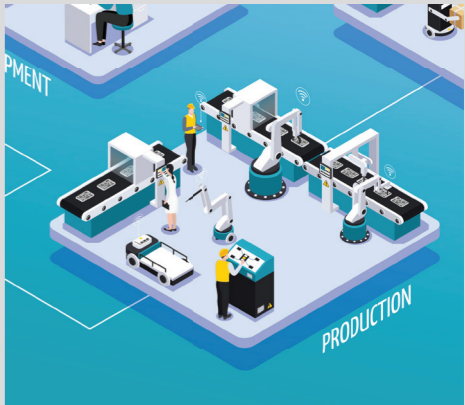
The Power backup solution for your critical equipment / production line

**Industry-leading Reliability**

Adopts advanced features to enhance reliability and maximize uptime

**Sophisticated Manageability**

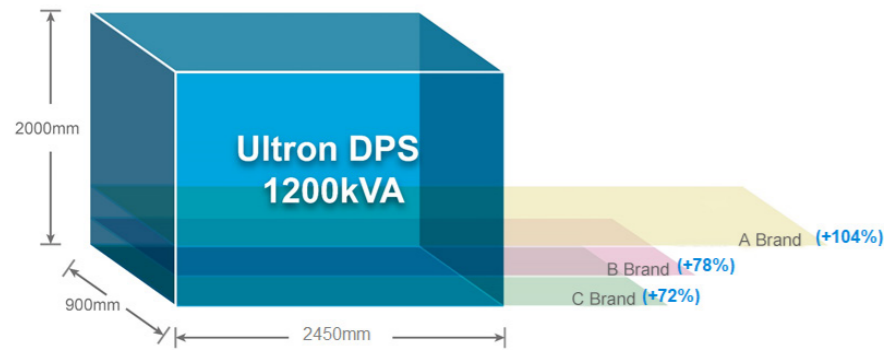
Integrates related data for easy access via LCD monitor



# Ultra Compact Design Excellent Power Performance and Efficiency

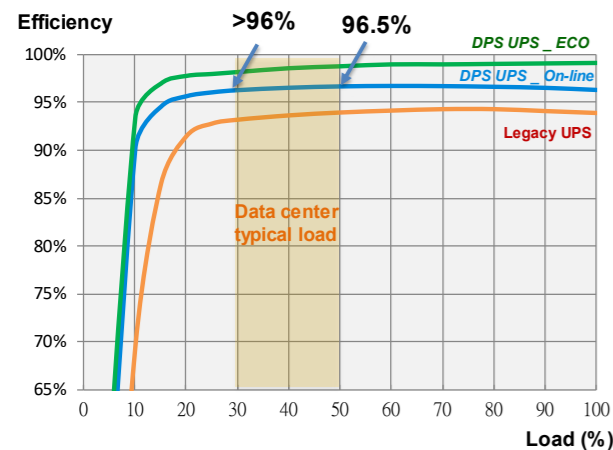
## Ultra Compact Design

The industry's leading power density and smallest footprint UPS is designed with both top/ bottom cable entry and inbuilt switches, which allows you to flexibly utilize the space under high power requirements. This high power density means less space is consumed by power infrastructure.



## Leading AC-AC Efficiency in Online Mode

Delta is firmly committed to making data centers as green as possible. The DPS series UPS is the best choice with its AC-AC conversion efficiency of up to 96.5% in normal operation and 99% in ECO mode. This high energy efficiency results in considerable energy savings for large data centers.



- AC-AC peak efficiency 96.5%
- The Ultron DPS is up to 96% efficient at light load conditions
- Efficiency 99% in ECO mode
- Supports UPSs operating in parallel at ECO mode

## Ready for Li-ion Batteries

With accumulated experience in power and thermal management, Delta's Lithium ion battery solution for UPS systems is a high value, innovative energy storage protection solution for data centers and critical infrastructure.

- Significantly reduced battery footprint and weight allow for a more effective use of space.
- Double the life and simpler maintenance compared to traditional batteries.
- Reduced cooling requirements.
- Improved backup storage predictability and manageability (Battery Management System is included).
- Reduced total cost of ownership (TCO).



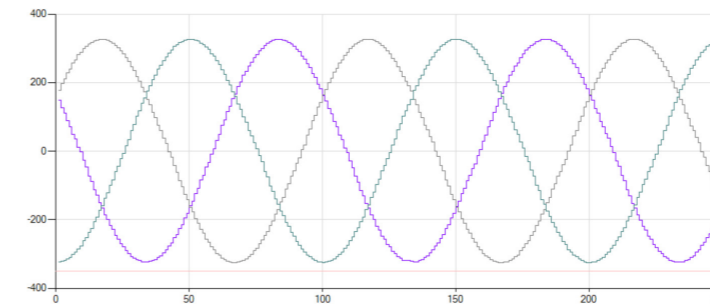
# Ultimate Availability for Mission Critical Operations

The Ultron DPS series is Delta's next-generation monoblock UPS system, designed with enhanced availability, performance and manageability. In terms of availability, the DPS series support parallel configuration for redundancy and expansion to avoid single points of failure, and its self-diagnosis and event analysis functions can notify IT managers when foreseeable errors occur, and allow preventive maintenance. Along with the fully-front access design, the MTTR (Mean Time to Repair) can be significantly reduced.

## Advanced Event Analysis

The DPS series offers key parameters and waveform records supporting advanced event analysis and diagnosis.

- Event triggers: Mode transfer / System shutdown / Charger turn-off abnormally
- Recorded parameters: Output voltage, current wave display, battery voltage, DC bus voltage, input voltage



Software: Delta Black Box

## Proactive Detection of Key Components

The DPS series UPS owns the state-of-the-art microprocessor technology which performs proactive self-detection of key components including batteries, fans, IGBTs and AC/DC capacitors. The system can also provide a complete and detailed operating status of the UPS. When the system detects an abnormal situation, it initiates an alarm.

The battery set is critically important in the event of a power outage. Battery health is essential if operation is to continue uninterrupted. Ultron DPS UPS systems can carry out proactive battery testing, perform capacity detection, and even forecast how fast batteries are aging by collecting and analyzing data.

## Easy Maintenance for Short MTTR

Fully front access and modular design of key components simplifies maintenance and shortens the mean time to repair (MTTR)



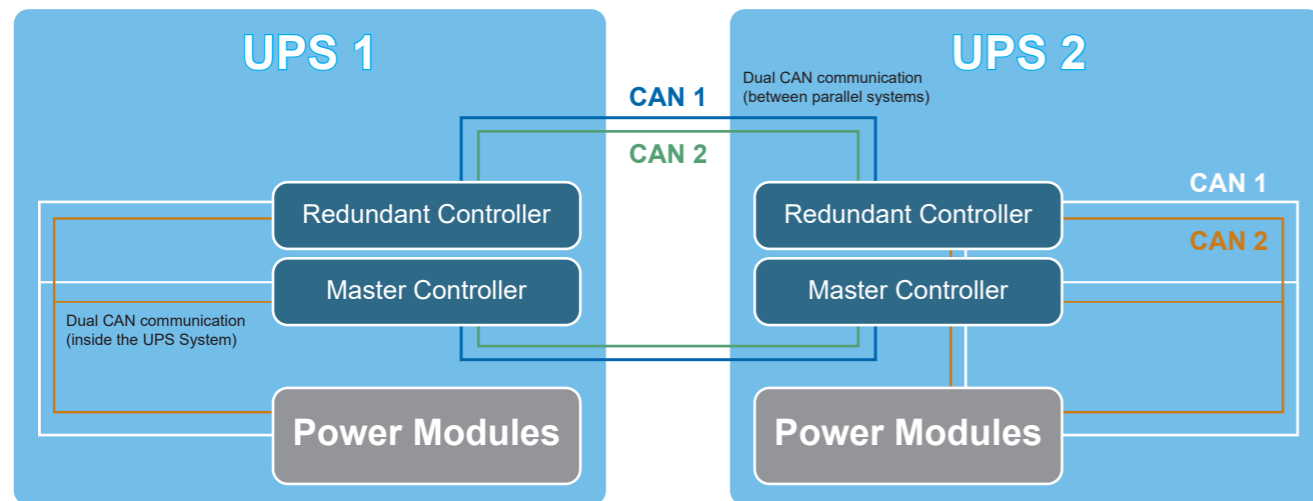
# Redundant Design for High Availability

The Ultron DPS series UPS is a highly redundant system that provides outstanding availability. By ensuring the design includes no single points of failure, Delta was able to build an extremely reliable solution. The DPS series' high availability feature achieves the best practice for optimizing the total cost of operating your data center.



## Controller & Signal Transmission

## System



The dual controller design provides a CAN bus redundancy, either inside the UPS system or between parallel systems as a daisy chain or ring connection.



Expanded relay I/O card and multifunctional communication card (optional)

Dual controllers ensure reliable communication and enable parallel system redundancy and synchronization.

Dual auxiliary power ports ensures a continuous power supply.

Up to **9.6** MW



Parallel expansion and N+X redundancy can be implemented to meet the power requirements of MW-level data centers. Ultron DPS series UPS systems grow with your business via parallel expansion with up to 8 units for 9.6 MW of total capacity.

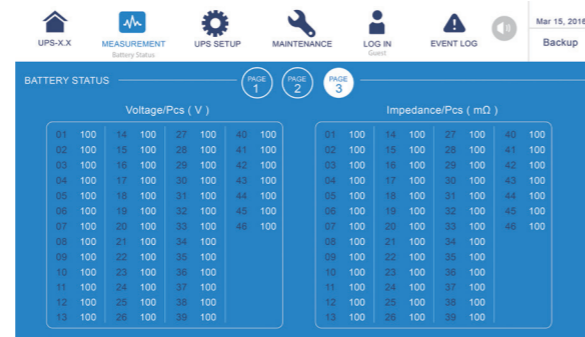
# High Manageability



Delta's DPS series UPS offers the ability to view up to 10,000 event logs on the touch panel. The unit's 10" LCD screen can optionally display information on security, cooling, fire protection, and temperature in addition to battery status. The availability of all this information on the touchscreen of the UPS allows for easy local management.

## Battery Management System

If the UPS is equipped with an external battery management system, the battery information (including battery charge/discharge current, voltage, resistance and environment temperature) can be integrated into the UPS and monitored via the LCD of the UPS. It is also compatible with other vendors' BMS hardware through open protocol interface and firmware customization.



## Environment Management System

Up to 16 pieces of EnviroProbe can be connected to UPS via Ethernet for data collection such as security, water, fire and temperature.



## Power Consumption Management

For better facility management, facility managers can monitor the power consumption and get a detailed energy usage analysis to understand the electricity tariff history by day / week / month / year.



Delta's InfraSuite Manager DCIM solution is also available as an option for more comprehensive data center infrastructure management.

# Technical Specifications

Model	DPS-300k	DPS-400K	DPS-500K	DPS-600K	DPS-800K	DPS-1000K	DPS-1200K	
Power Rating	kVA	300	400	500	600	800	1000	1200
	kW	300	400	500	600	800	1000	1200
Input	Nominal Voltage	220/380V, 230/400V, 240/415V (3-phase, 4-wire + G)						
	Voltage Range	176/304~276/478 VAC (full load)						
	Current Harmonic Distortion	<3% (with Full Linear Load); <5% (with Full Non-linear Load)						
	Power Factor	> 0.99						
	Frequency Range	40 ~ 70 Hz						
Output	Voltage	220/380V, 230/400V, 240/415V (3-phase, 4-wire + G)						
	Voltage Harmonic Distortion	<1.5% (Linear Load); <5% (Non-linear Load)						
	Voltage Regulation	±1% (static); ±5% (dynamic)						
	Output Power Factor	1						
	Frequency	50/60Hz (Auto-Selectable)						
	Overload Capability	≤ 125%: 10 min; ≤ 150%: 1 min; >150%: 1 sec						
	Display	10" Color Touch Panel						
Interface	Standard	RS232, Parallel port, USB, Modbus RS485, Input dry contact, Output dry contact, SNMP card inbuilt in touch screen						
	Optional	Relay I/O card, Battery cabinet temperature sensor cable						
Conformance	Safety	CE						
Efficiency	AC-AC Mode	Up to 96.5%						
	ECO Mode	99%						
Battery	Type	VRLA, LiB						
	Charge Current	90A	120A	150A	180A	240A	300A	360A
	Battery Quantity	30 – 46 pcs						
Environment	Operating Temperature	0 ~ 40°C						
	Relative Humidity	0 ~ 95% (non-condensing)						
	Audible Noise	<80 dB						
	IP Protection	IP 20						
Others	Parallel Redundancy and Expansion	Maximum 8 units						
	Emergency Power Off	Remote and local						
Physical	Dimensions (W x D x H)	600 mm*	1200 mm*	1200 mm*	1200 mm*	1800 mm	2450 mm	2450 mm
		900 mm	900 mm	900 mm	900 mm	900 mm	900 mm	900 mm
		2000 mm	2000 mm	2000 mm	2000 mm	2000 mm	2000 mm	2000 mm
	Weight	515kg	700kg	811kg	970kg	1270kg	1850kg	2000kg

\* The width is for the cabinet which has four inbuilt switches.

\* For DPS 300 kVA, only top cable entry is available.



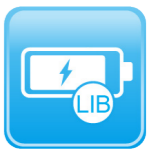
DPS series 300-600kVA is highly integrated with four built-in switches as standard model



Fully front access and modular design of key components simplifies maintenance and shortens the mean time to repair (MTTR)



User-friendly 10" color touch screen



Ready for Li-ion Batteries

# Data Center Solution Offering

Delta's InfraSuite offers a comprehensive, modular and highly integrated portfolio to support the creation of high-performance data centers. As a global leader in thermal and power management solutions, Delta has further strengthened its leading position in data center infrastructure with a complete offering of AC or DC power, cooling systems, monitoring platforms from micro and modular to containerized solutions.

## Our Service and Capability

- Provides total data center life cycle services, including consulting, design, simulation, implementation and after service.
- Designs and builds data centers per customer requirements using optimal solutions.
- Offers comprehensive power supply, power distribution, cooling system, modular racks and DCIM solutions for implementation anywhere.



- Generator
- Switch Gear
- MV/LV Transfer Switch
- Large UPS
- Modular UPS
- Rack level UPS
- 12 / 48VDC System
- HDVC System
- STS/ rSTS
- PDU/ rPDU
- Busway



- Cooling Tower
- Chiller
- RowCool
- Rear Door
- Fan Wall
- Hot Aisle
- Containment System



- DCIM
- Building Automation System
- Surveillance
- Video Wall
- Lighting



- OCP Rack
- Rack
- rPDU
- Switch
- DCI Router

