

# PowerWAVE 9000DPA

Designed to meet the requirements of today – and tomorrow



# PowerWAVE 9000DPA: Delivers class-leading 'Six Nines' (99.9999%) power availability.

## PowerWAVE 9000DPA

Up to 250 kVA (200 kVA N+1) in  
a single frame

Parallelable up to 1.5 MVA

Transformerless technology

96% true online efficiency

Near unity power factor at parallel and full  
loads (0.99% @ 100% load)

Low input harmonic distortion (THDi<3%)

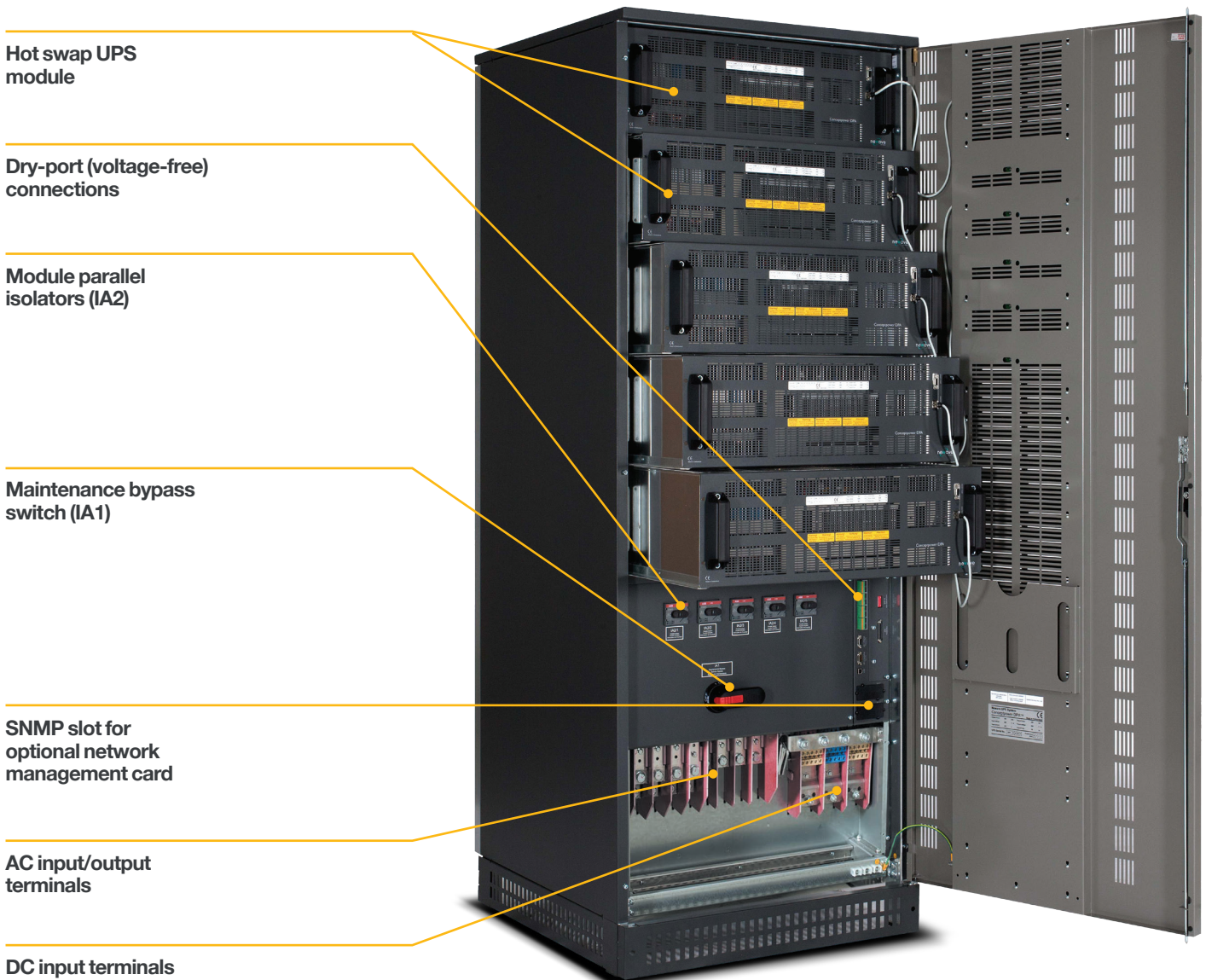
Fully rated output power (Blade friendly)

Online double conversion technology

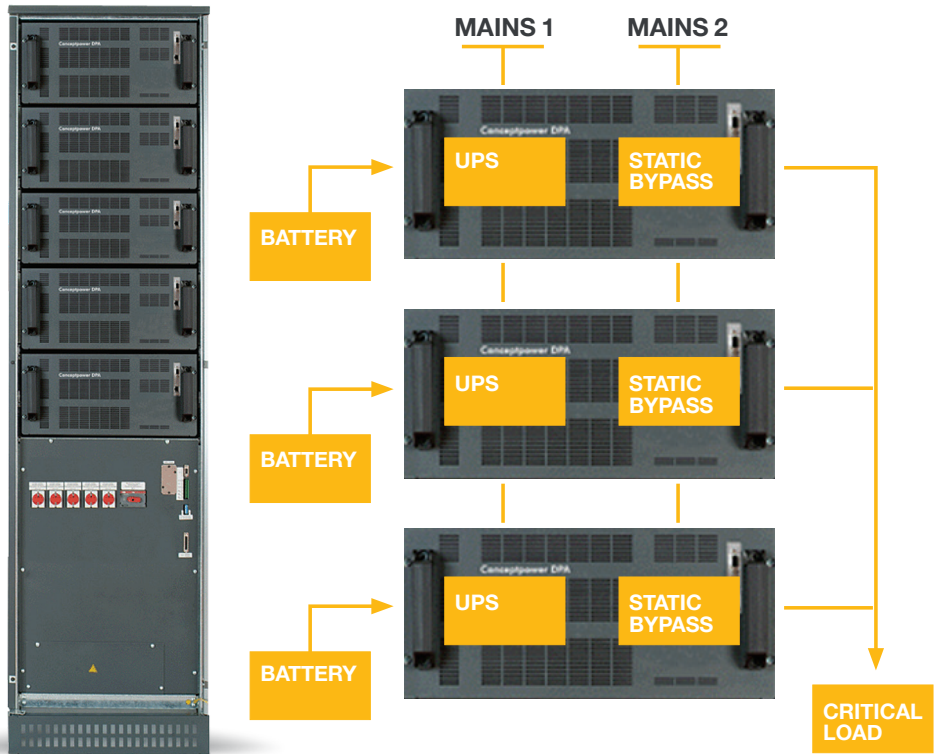
Low total cost of ownership

Listed on the Carbon Trust's Energy  
Technology List for Enhanced Capital  
Allowances (ECA)

For more information call 01256 386700  
or visit [www.upspower.co.uk](http://www.upspower.co.uk)



In today's 'on demand' world, highly reliable power protection systems are essential to the protection of critical data and to ensure 24/7 availability for business applications.



### Advanced Decentralised Parallel Architecture (DPA)

#### Key benefits

- Distributed control and power.
- Independent hot-swap modules.
- No single points of failure.

Decentralised Parallel Architecture (DPA) means each UPS module contains all the hardware and software required for full system operation. They share no common components so a DPA parallel system offers extremely high availability. In addition, potential single points of failure are eliminated and system uptime is maximised. PowerWAVE 9000DPA UPS modules can be paralleled to provide redundancy (parallel redundancy) or to increase the system's total capacity.

### Easy to replace 'hot-swap' modules

#### Key benefits

- Replace or add modules with no downtime/no risk.
- Simple power upgrade.

True 'hot-swap' modularity enables the safe removal and/or insertion of UPS modules into a PowerWAVE 9000DPA system without risk to the critical load and without the need to either transfer the critical load onto raw mains or remove power from the critical load. This directly addresses today's requirement for continuous uptime, reducing mean time to repair (MTTR).

### Future proof installation

#### Key benefits

- Investment protection.

Future proof installation is assured with the PowerWAVE 9000DPA's scalability and ability to supply the most demanding of modern loads.



---

## Smallest footprint saves space

---

### Key benefits

- Extremely high power density.
  - Uses less valuable floor space.
- 

Class leading power density of 342kW/m<sup>2</sup> significantly minimises the floor space required to accommodate the PowerWAVE 9000DPA. This is particularly important in data centres where space must be maximised to accommodate revenue-earning equipment.

---

## Maximum availability

---

### Key benefits

- Six Nines availability 99.9999%.
- 

PowerWAVE 9000DPA maximises availability by combining the benefits of decentralised parallel architecture, parallel redundancy and 'hot-swap' modularity.

---

## Enhanced Capital Allowance (ECA) scheme

---

### Key benefits

- Reduced operating costs
  - Reduced capital expenditure
- 

The PowerWAVE 9000DPA now offers an exceptionally low cost of ownership with its inclusion on the **Carbon Trust's Energy Technology List (ETL) for Enhanced Capital Allowances (ECA)**. This means businesses are able to offset the total cost of the equipment against taxable profits within the year of purchase.



---

## High reliability

---

### Key benefits

- Reliability maximised.
  - Automatic parallel redundant operation.
- 

Parallel redundant (N+1) UPS systems provide the highest level of reliability by ensuring that the number of UPS modules in the system is a minimum of one over and above the number required (N) to fully support the critical load. The PowerWAVE 9000DPA is designed to automatically operate as a parallel redundant system, ensuring that the critical load always receives the highest possible level of power protection.

---

## Low cost of ownership

---

### Key benefits

- High operating efficiency, regardless of loading.
  - Reduced installation and upgrading costs.
  - Near unity input power factor and low input THDi.
- 

By delivering energy efficiency, scalable flexibility and ergonomic design, the PowerWAVE 9000DPA offers a low total cost of ownership and easy serviceability.

---

## Blade friendly

---

### Key benefits

- Supports blade servers.
  - Supports leading power factors.
- 

Blade servers typically have a leading power factor, which can present problems to UPS systems, particularly if they are not designed to power such loads. The PowerWAVE 9000DPA is designed to power all types of electrical loads, including blade servers. It can provide fully rated output power to power factors in the range of 0.9 leading to 0.8 lagging.

“

UPSL came with a very competitive quote and an excellent reputation for support and service. After looking at the PowerWAVE 9000DPA it was clear it offered the best solution. It had the N+1 redundancy we wanted and with its modular technology it provided the flexibility to expand the system in line with our growth, eliminating unnecessary capital expenditure at the outset and avoiding excessive energy costs. ”

Conleth McCallan,  
Managing Director,  
Datatet

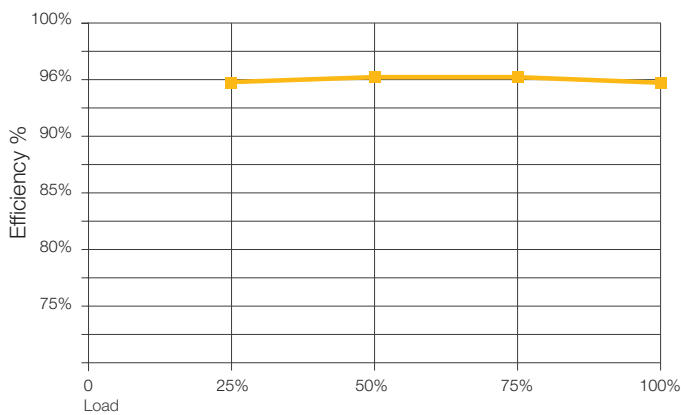
“

The solution we chose saved us having to spend a large amount of capital on power protection on day one and yet gave us the high availability our customers demand. Crucially, however, it is also truly modular, giving us the flexibility to increase capacity and grow the system in-line with our changing requirements. We looked at other solutions but didn't find any as suitable as this. ”

Nick Williams,  
Co-Founder & Director,  
Sleek Networks

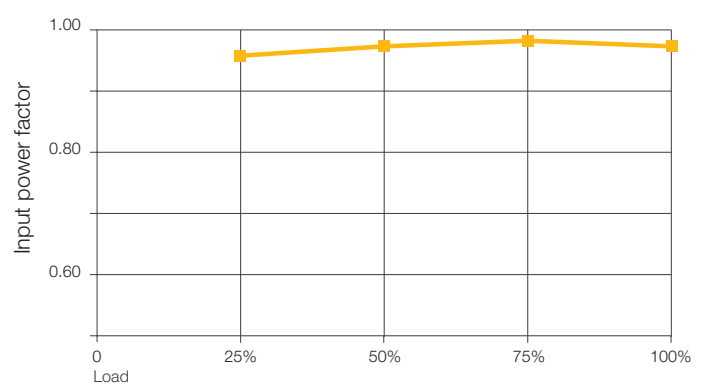
## Class leading energy efficiency

AC- AC Efficiency



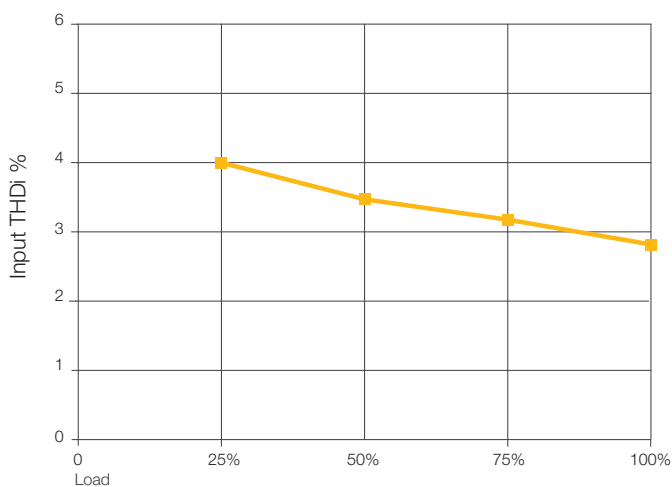
The PowerWAVE 9000DPA's 96% true online efficiency, significantly reduces system running costs and site air-conditioning costs. This helps reduce the organisation's carbon footprint.

Input power factor



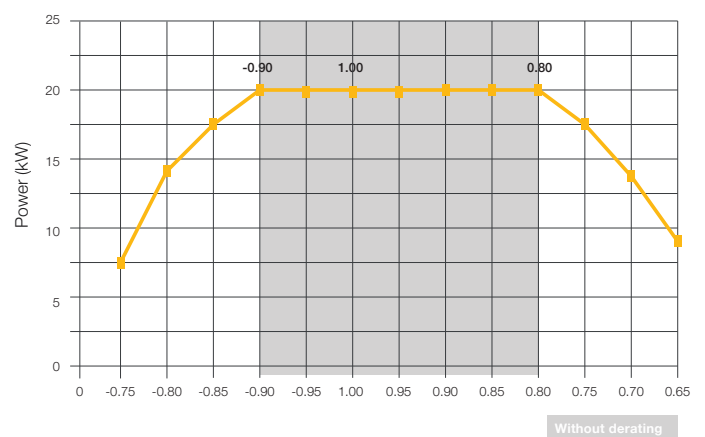
Near unity input power factor, at partial and full load, reduces the required size of the input cable and fuses, thereby reducing the materials (and costs) associated with the system's electrical installation.

THDi



Input current total harmonic distortion (THDi) of <3% virtually eliminates harmonic pollution of the mains supply.

Leading/Lagging



Fully rated output power to power factor in the range of 0.9 leading and 0.8 lagging

Increased reliability  
 Increased flexibility  
 Increased efficiency

Decreased floor space required  
 Decreased heat loss  
 Decreased cost of ownership



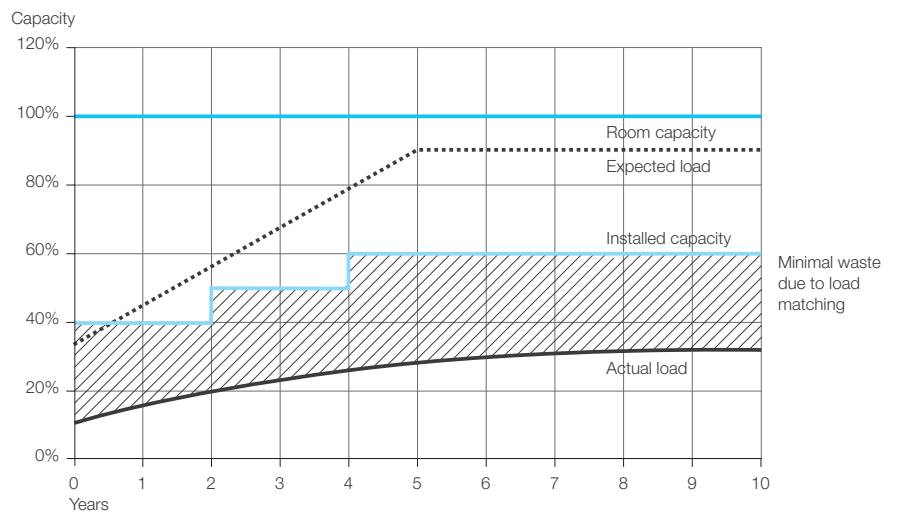
## Cost effective scalability

### Key benefits

Ability to 'rightsize' the system over time.  
 Simple installation of new modules.

UPS modules can be added in cost-effective incremental steps as the critical load power requirement grows. This 'rightsizing' reduces initial cost, optimises operating efficiency and helps reduce total cost of ownership.

Up to five UPS modules can be paralleled in a single rack-format cabinet to enable up to 200kW (342kW/m<sup>2</sup>) of power capacity per cabinet, providing 'vertical scalability'. If more capacity is required, cabinets can be paralleled providing 'horizontal scalability'.



**Uninterruptible Power Supplies Ltd,**  
 Woodgate,  
 Bartley Wood Business Park,  
 Hook, Hampshire RG27 9XA

**Tel:** 01256 386700

**Fax:** 01256 386701

**Email:** sales@upspower.co.uk

