

Designed to meet the requirements of today – and tomorrow.

#### Key benefits

Individual static switches per module

Each module has its own display and controller

Each module has its own control logic

Separate or common battery configuration

Delivers class-leading 'six nines' (99.999%) power availability.

A revolutionary rack-mounted uninterruptible power supply designed with 'hot swap' modules for future scalability. A transformerless UPS system with class-leading 'six nines' (99.9999%) power availability for demanding IT environments and data centres.

### 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 input power factor at partial and full loads (0.99% @ 100% load)

Low input harmonic distortion (THDi<3%)

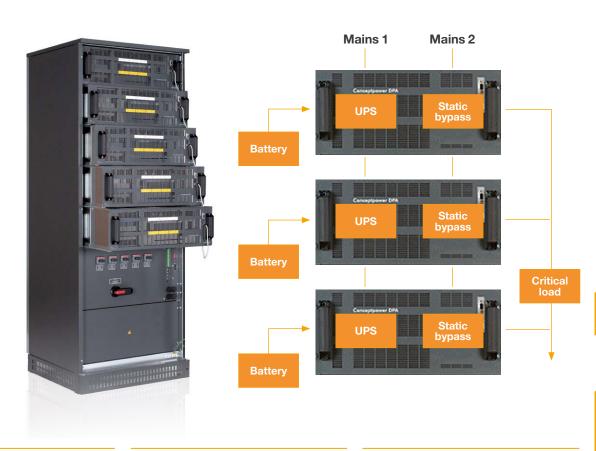
Fully rated output power (blade friendly)

Online double conversion technology

Low running costs



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)

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

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**

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

Extremely high power density

Uses less valuable floor space

Class-leading power density of 342 kW/m² 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**

Six nines availability 99.9999%

PowerWAVE 9000DPA maximises availability by combining the benefits of Decentralised Parallel Architecture, parallel redundancy and 'hot-swap' modularity with low MTTR.



Horizontal scalability

#### **High reliability**

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 running costs

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.

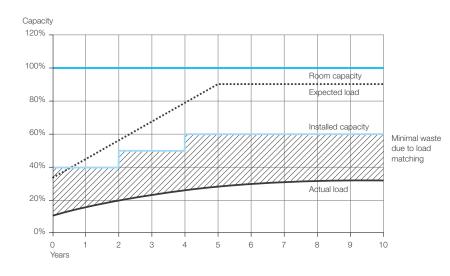
#### **Blade friendly**

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.





#### **Right sizing**

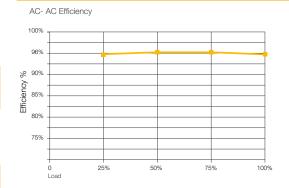
Cost-effective scalability

Ability to 'right size' the system over

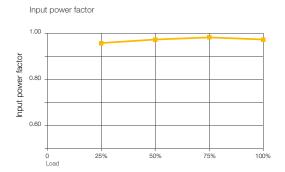
Simple installation of new modules

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

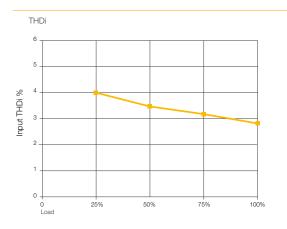
Up to five UPS modules can be paralleled in a single rack-format cabinet to enable up to 200 kW (342 kW/m²) of power capacity per cabinet, providing 'vertical scalability'. If more capacity is required, cabinets can be paralleled providing 'horizontal scalability'.



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.



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.



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



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













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