PowerWAVE 8000DPA

(10–20 kVA/kW)

Parallelable up to 400 kVA/kW

Modular UPS designed for low and medium power applications.

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

PowerWAVE 8000DPA

Capacities from 10 kVA/kW to 200 kVA/kW in 10 kVA/kW or 20 kVA/kW modular steps
Parallelable frames up to 400 kVA/kW
Available as tower (ST) or 19” rack-mountable (RI) solutions
Fully rated output power (blade friendly); 20 kVA = 20 kW
N+1 redundancy up to 180 kVA/kW N+1 in a single frame
‘Six nines’ (99.9999%) availability
Up to 95.5% efficiency across a wide load range
Near unity input power factor at partial and full loads (PF=0.99 @ 100% load)
Low input harmonic distortion (THDi<3%)

Ideal for low to medium, high-density critical power protection applications.

Three-phase UPS built for low to medium, high-density power protection applications. Leading-edge modular design using proven Decentralised Parallel Architecture (DPA) technology. The PowerWAVE 8000DPA offers incredible energy efficiency, 99.9999% availability and flexible scalability in either a tower or rack-mountable solution.

The right solution – PowerWAVE 8000DPA is available in two versions

PowerWAVE 8000DPA ST (tower) is available for high-density applications requiring a standard power protection solution including frame, UPS, battery and communication. This solution delivers power protection from 10–200 kVA/kW (180 kVA/kW N+1) in 10 kVA/kW or 20 kVA/kW modular steps to provide a maximum power density of 472 kW/m^2. PowerWAVE 8000DPA cabinets can be paralleled horizontally to increase the capacity up to 400 kVA/kW.

The PowerWAVE 8000DPA RI (19" rack-mountable) solution includes UPS, battery and communication, which can be integrated into any 19" rack (independent of manufacturer) and provides up to 80 kVA/kW (60 kVA/kW N+1) making it ideal for integrated IT, telecom or other applications.

Advanced Decentralised Parallel Architecture (DPA)

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

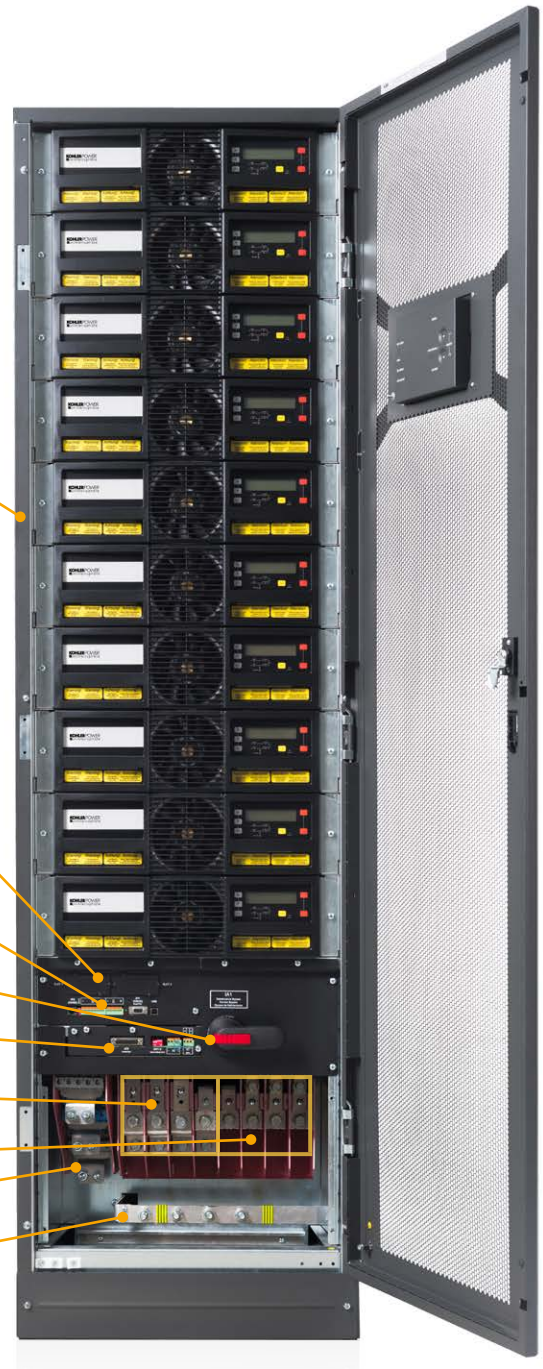
Decentralised Parallel Architecture (DPA) means each UPS module contains all the hardware and software required for full-system operation. They share no common components so a DPA parallel system offers extremely high availability. In addition, potential single points of failure are eliminated and system uptime is maximised. PowerWAVE 8000DPA 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
- Cost effective scalability & 'right sizing'
- Simple power upgrade
- Future proof investment

True 'hot-swap' modularity enables the safe removal and/or insertion of UPS modules into a PowerWAVE 8000DPA 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).

PowerWAVE 8000DPA ST (tower)



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 a system is a minimum of one over and above the number required (N) to fully support the critical load.

The PowerWAVE 8000DPA is designed to automatically operate as a parallel redundant system, ensuring that the critical load always receives the highest level of power protection.

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 8000DPA 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.

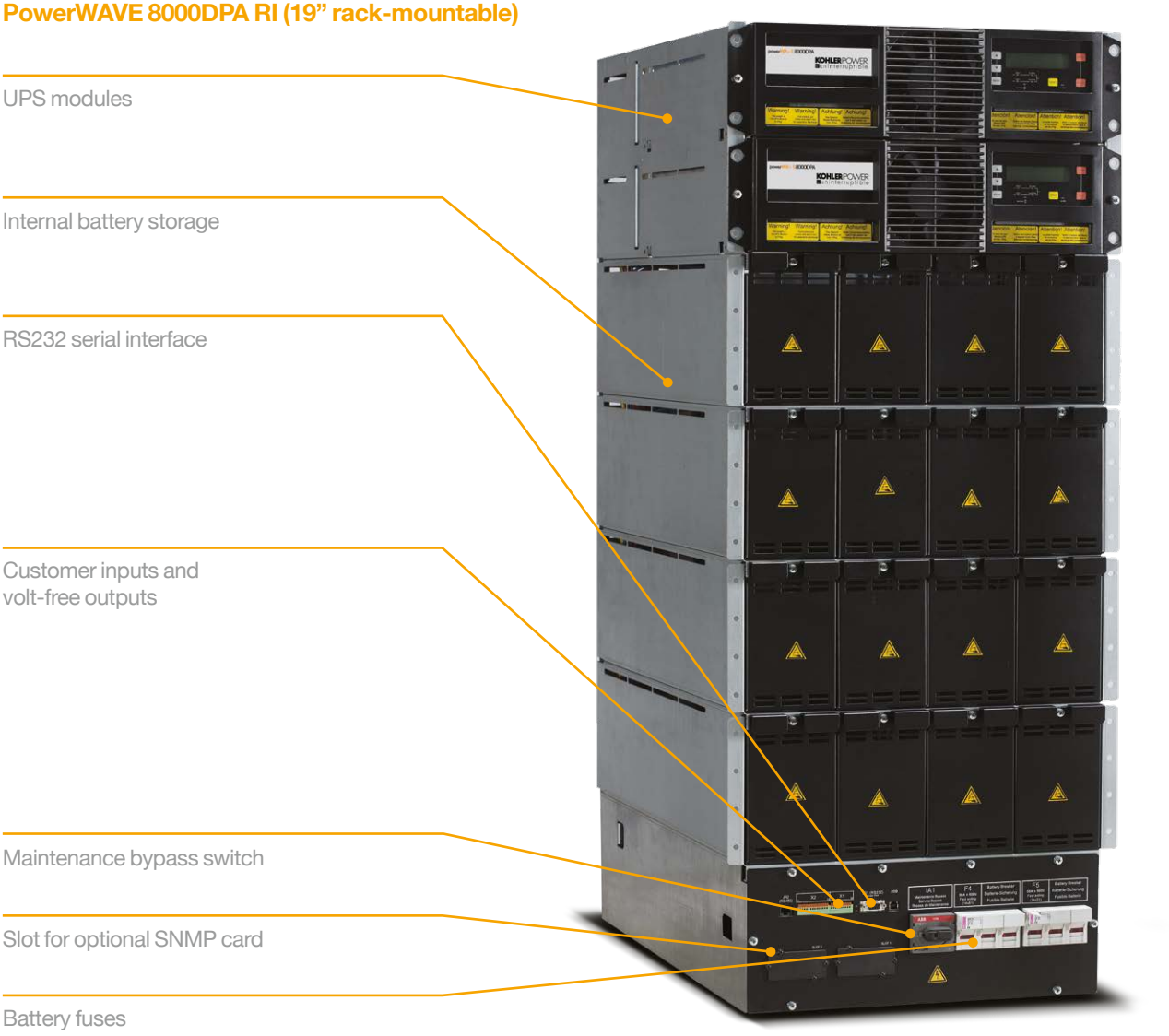
Generator friendly

Generator compatible

Soft start – introduces the generator load in steps

The PowerWAVE 8000DPA offers a highly effective solution when introducing a generator to the critical load. If the load exceeds 50 per cent of the generator's standby rating, switching the load in a single step presents a number of dangers. To negate this, each of the 'hot-swap' modules within the PowerWAVE 8000DPA's modular frame come equipped with 'soft start' capability. This allows the modules to be switched on sequentially, introducing the generator to the load in more manageable steps.

PowerWAVE 8000DPA RI (19" rack-mountable)



Class-leading energy efficiency – low total cost of ownership

Very high operating efficiency

Reduced installation and upgrade costs

Near unity input power factor and low input (THDi) – reduces running costs

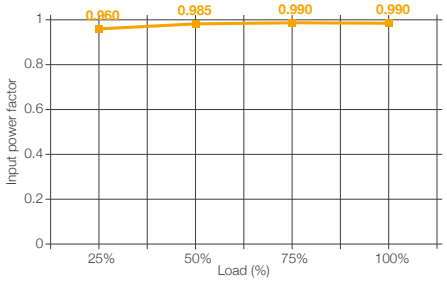
The PowerWAVE 8000DPA delivers class-leading efficiency of up to 95.5% across a wide load range, significantly reducing system running costs and site air conditioning costs.

Additionally, PowerWAVE 8000DPA has a near unity input power factor at full load (and even partial loads) reducing the size of the input cable and fuses, thereby saving on materials and costs.

Input current total harmonic distortion (THDi) of less than 3% virtually eliminates harmonic distortion of the mains supply. This saves unnecessary oversizing of gen-sets, cabling and circuit breakers; avoids extra heating of input transformers; and extends the overall lifetime of all input components.

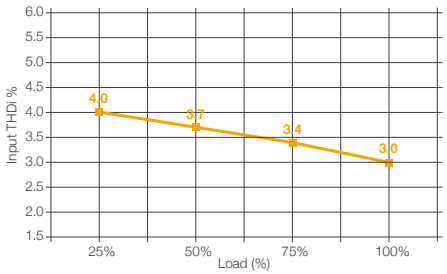
All these benefits ensure that the PowerWAVE 8000DPA offers one of the lowest 'total cost of ownerships' and smallest carbon footprints of any UPS system in its class.

Input power factor versus load (Leading)



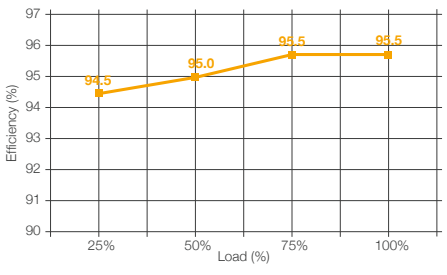
PowerWAVE 8000DPA has a near unity input power factor at full load (and even partial loads) reducing the size of the input cable and fuses, thereby saving on materials and costs.

Input current distortion THDi



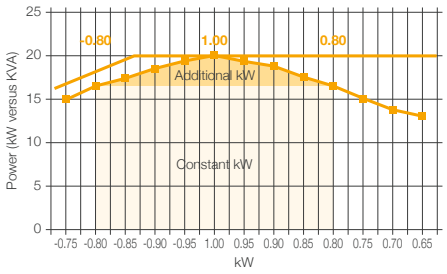
Input current total harmonic distortion (THDi) of <3% virtually eliminates harmonic distortion of the mains supply.

Reduced TCO – AC–AC efficiency



The PowerWAVE 8000DPA's 95.5% true online efficiency significantly reduces system running costs and site air-conditioning costs. This helps reduce the organisation's carbon footprint, depending on configuration.

Blade server friendly power



Designed to power all types of electrical loads including blade servers, the PowerWAVE 8000DPA can provide fully rated output power from 0.9 leading to 0.8 lagging, depending on battery configuration.

PowerWAVE 8000DPA ST

ST tower range – 10–200 kVA/kW

ST 40 – 2 modules

Dimensions W x D x H:
550 x 770 x 1135 mm

No. of internal batteries:
2 x 40 x 7.2/9Ah
Total 80 blocks

ST 60 – 3 modules

Dimensions W x D x H:
550 x 770 x 1975 mm

No. of internal batteries:
3 x (2x40) x 7.2/9Ah
Total 240 blocks

ST 80 – 4 modules

Dimensions W x D x H:
550 x 770 x 1135 mm

External battery ONLY

ST 120 – 6 modules

Dimensions W x D x H:
550 x 770 x 1975 mm

External battery ONLY

ST 200 – 10 modules

Dimensions W x D x H:
550 x 770 x 1975 mm

External battery ONLY

PowerWAVE 8000DPA RI

19" rack-mountable range – 10–80 kVA/kW

With batteries
RI 11 – 1 module

Dimensions W x D x H:
448 x 735 x 487 mm (11 HU)

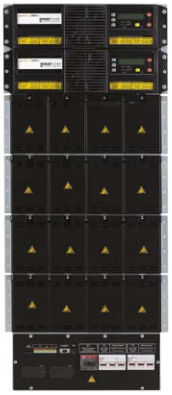
RI 12 – 1 module

Number of batteries: 40

RI 22 – 2 modules

Dimensions W x D x H:
448 x 735 x 665 mm (15 HU)

Number of batteries: 80



RI24 – 2 modules

Dimensions W x D x H:
448 x 735 x 798 mm (18 HU)

Number of batteries: 80

Without batteries
RI 10 – 1 module

Dimensions W x D x H:
448 x 735 x 310 mm (7 HU)

RI 20 – 2 modules

Dimensions W x D x H:
448 x 735 x 440 mm (10 HU)

RI 40 – 4 modules

Dimensions W x D x H:
448 x 735 x 798 mm (18 HU)

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