



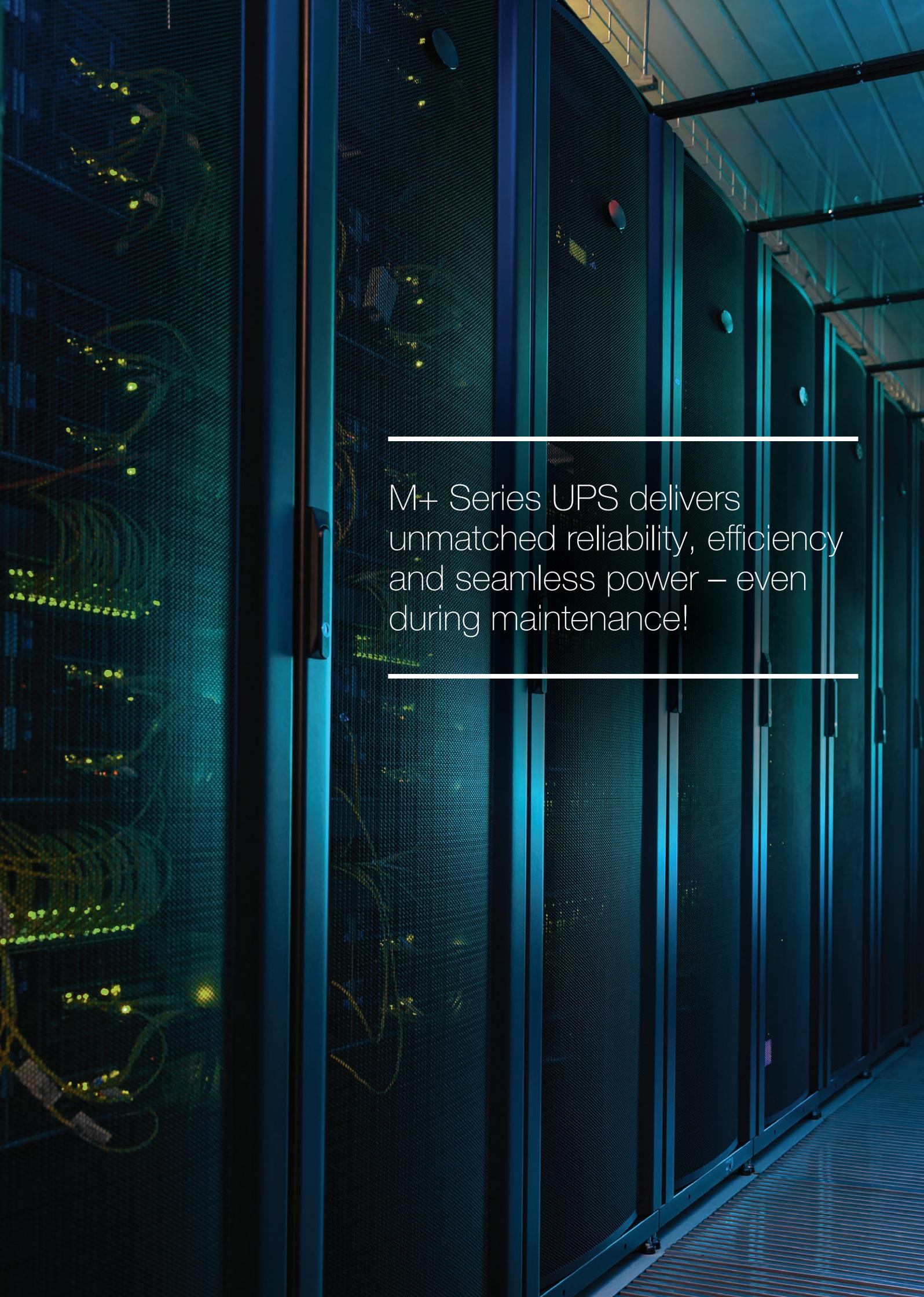
PILLER

Power Systems

Nothing protects quite like Piller

M+ Series

Modular Static UPS 250 - 1200kW

A photograph of a server room with blue lighting. The server racks are visible, and the floor is a metal grating. The text is centered in the middle of the image, flanked by two horizontal white lines.

M+ Series UPS delivers unmatched reliability, efficiency and seamless power – even during maintenance!

M+ Series – 250-1200kW High-Density Modular Power Protection

As data centres expand in scale and complexity, the need for reliable, efficient and adaptable power solutions is more critical than ever. The **Piller M+ Series Modular Static UPS**, with power capacities from **250kW to 1200kW**, delivers high-performance, scalable solutions tailored for data centres of all sizes.

Designed for modern IT infrastructures – including high-performance computing (HPC), artificial intelligence (AI), hyperscale data centres and colocation facilities – the M+ Series models offer superior reliability, efficiency and uninterrupted operation, even during maintenance or upgrades.

With a global network of expert service technicians supporting over 10,000 high-power UPS units across 40+ countries, Piller ensures continuous, 24/7 operational excellence for clients in finance, industry, communications, aviation and defence.



M+ 1200



M+ 500

Why choose Piller's M+ Series modular static UPS?

The hot-swappable module design enables quick plug-and-play maintenance

The M+ Series is a high density modular static UPS with remarkable efficiency of up to 98%. The design supports the addition of multiple power modules and can be customised to your exact power performance needs with capacities ranging from 250 to 1200kW in a single unit. Its compact footprint makes it suitable for a variety of applications and the hot-swappable module design enables quick plug-and-play maintenance.

Versatile for a variety of applications:



Data centres



Manufacturing



Healthcare



Communications

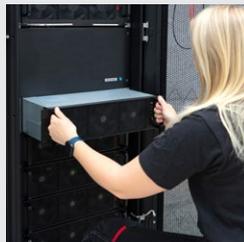
Smarter service

SLAs available in range of levels

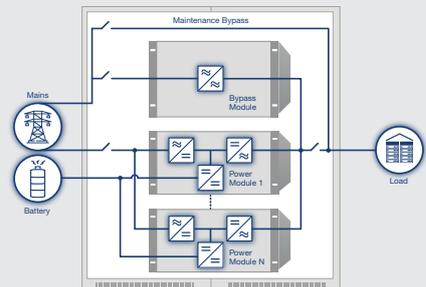
- Service – provides a basic annual maintenance visit
- Power Service – in addition to “Service”, provides emergency support 24/7
- Power Service Advantage – in addition to “Power Service” provides the maximum level of support. It covers all costs for repairs, including travel, labour and parts (excluding battery systems)

Self-help hot-swap modules

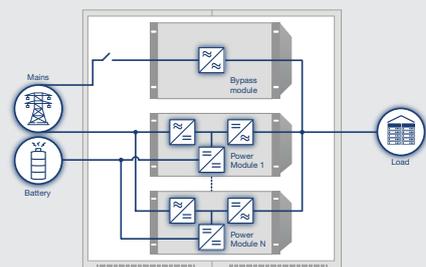
- The M+ Series hot-swap architecture allows for component replacement without system shutdown, reducing downtime and ensuring continuous operation. Operator training can be provided for fast self-fix as part of a Service Level Agreement (SLA).



Single-line diagram 500 kW



Single-line diagram 800 kW - 1200 kW



High efficiency for mission critical applications

High Reliability

High short circuit capacity duration provides high system protection. The modular, hot-swappable power modules ensure uninterrupted operations and reduce downtime. Intelligent fan control and redundant design architecture maximises efficiency and lifetime further ensuring reliability.

Flexible Scalability

The system can be customised exactly to the power performance needs. As needs change, additional power modules can easily be added to deliver a greater power density in a compact footprint.

High Performance

Featuring a wide input voltage and frequency tolerance, the system offers exceptional grid adaptability and battery life extension.

Low MTTR

Power and Bypass modules are hot-swappable, being replaceable with the UPS online and without bypass/offline operation.

Intelligent Control

The M+ Series Intelligent Control system minimises the need for human intervention maximising efficiency and module life.

Lithium-ion Backup Battery

The backup lithium-ion battery system uses a modular parallel design, offering a safe, smart and simple solution compatible with Piller M+ Series UPS, with power capacities ranging from 250kW to 1200kW. Its features include automatic module failure detection and exit, ensuring other modules continue to function without disruption.

Additionally, the modular design allows for easy expansion, reducing both operational and capital expenditure. It supports flexible capacity expansion through modules or cabinets, while the smart battery testing feature can assess the battery's capacity without cutting off the power supply. The system is compatible with both new and old lithium-ion batteries from different suppliers, featuring intelligent current equalisation and adaptive state-of-charge management to prevent overcharging or over-discharging. With fault recording, early warnings, and quick fault location, the system enhances reliability, reduces maintenance costs and improves overall safety.

Compatible with the advanced and expandable lithium-ion backup battery system



Hot-swappable lithium-ion backup battery solution

M+ Series highlights

High reliability combined with scalability, performance and intelligent control

- **Future-proof UPS design**
Modular and flexible satisfying scalable power needs
- **Intelligent Control**
Optimised efficiency and extended lifetime
- **Flexible configuration**
Scalable from 250kW/kVA up to 9600kW/kVA in parallel configuration
- Low MTTR – minimum maintenance downtime due to hot-swappable modules
- Low investment costs with partial module deployment
- Increased power density – up to 500kW/m²
- Compatible with various battery technologies

M+ 500



M+ 800



M+ 1200



M+ 500

- Up to 10 power modules with 50kVA each
- For a total of 500kW and an efficiency up to 96.7%

M+ 800

- Up to 8 power modules with 100kVA each
- For a total of 800kW and an efficiency up to 98%

M+ 1200

- Up to 12 power modules with 100kVA each
- For a total of 1200kW and an efficiency up to 98%

M+ Series – High density, modular static power protection



Technical Specifications

Output

Rated active power (380V/400V/415V)	kW	500	800	1200
Power modules	kW	50	100	100
Power modules max.		10	8	12
Voltage stability	%	±1		
Frequency stability	%	±1		
Voltage distortion (EN 62040-1)				
■ linear load	%	<1		

Battery

Nominal voltage of the battery		±240 (-60/+36)	±240 (±60)	
Maximum charging current	A	300	240	360
Battery protection (fuse) acc. to IEC/EN 60 947-3		required to battery		

Input

Nominal power factor		0.99		
Rated voltage (rated frequency)	V	380/400/415 ±20% (50/60Hz)		
Frequency range	Hz	40-70		
Total harmonic current distortion	%	< 3		
Starting time including precharge	s	30		

General data

Rated power	kVA	500	800	1200
Efficiency				
■ at load PF1	%	up to 96.7	>98	
UPS classification		VFI SS 111		
Interfaces (standard)				
■ communication		RS232/485 (Modbus)/Dry contact/SNMP		
Ambient temperature (daily mean average)	°C	0-40 (40-50 derated output power)		
Ambient humidity (without condensation)	%	5-95		
Humidity class		IEC 721 2-1		
Installation altitude (above mean sea level)				
■ up to 1000m		without any derating		
Protection type (IEC/EN 60529, VDE 0470-1)		IP 20		
Insulation group		DIN / VDE 0110 (voltage-category 2)		
Radio interference level (IEC 62040-2, VDE 0558-520)		Class 3		
Colour standard		Pantone process black C		
Dimensions (WxDxH)	mm	1200x860x2000	1400x1000x2000	1800x1000x2000
Weight	kg	870	1120	1424
Cable connection		from top and bottom	from top (bottom possible)	
Accessibility		front		
Parallel configuration		8 units		

Hardware Options

- Two independent mains connections
- Battery temperature sensor
- Surge protection module
- BMS card for Lithium Battery
- I/O-card (2 maximum)

Modifications reserved.

HEADQUARTERS

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