

100kw (U.P.S)

The 100kW 1 x 125kW UPS N+1 with 10 Mins Autonomy

CumulusPower™ is Swiss made three-phase, online double conversion and fully decentralised modular Uninterruptible Power Supply.

From **10kW to 3.6MW** CumulusPower provides the maximum flexibility to adapt to any application. By eliminating single points of failure, the Decentralised Active-redundant Architecture (DARA), helps reduce human error and the time to maintain and repair. CumulusPower™ delivers an industry leading. Availability of 9 nines to fulfil the needs of the most critical power applications.

Proven Reliability

30 years of experience

Distributed Architecture

No Single Point of Failure

9 Nines Availability

Zero Downtime

Unity Power Factor

kVA = kW

Highest Efficiency

+97.1%

Flexibility

Series of frame sizes

Pay as you grow

Hot Swappable Modules

Fast Replacement of

Intelligent Modules

Lowest Total Cost of Ownership

Reduced Component Count

Simplifies Maintenance

Outstanding Overload Capability



+97.1% Efficiency
VFI

Availability to the next level 99.9999999% (9 nines)

The higher the **Availability**, the lower the downtime. By eliminating any single point of failure, adding active-redundant technology, preventing human error and reducing the time to maintain and repair, CumulusPower™ delivers an **industry leading Availability of 9 nines** to fulfil the needs of the most critical power applications. CumulusPower™ takes downtime from seconds to the milliseconds level. **Availability** is formally defined as $\frac{MTBF}{MTBF+MTTR}$ CumulusPower™ maximizes the Mean Time Between Failure (MTBF) while minimizing the Mean Time To Repair with a series of future.

Triple-mode parallel bus

Multi-frame connection is one of the advantages of horizontal scalability. Communication between frames and modules is critical, nevertheless, for some architectures, it is still a single point of failure. CumulusPower™ parallel communication is provided with a unique triple-mode parallel bus, that consists of three independent communication lines and three independent electronic circuits. With triple redundancy in the communication lines and electronic circuits the risk of disconnection or short-circuit on any of the communication lines is mitigated eliminating the single point of failure.

Full Bypass redundancy

Some UPS architectures still use centralised critical components like a Single Bypass Architecture (SBA). Centralised components in a parallel system represent single points of failure. Unlike the centralised architectures, Centiel's modular UPS, CumulusPower™, is equipped with a Distributed Bypass Architecture (DBA), that brings full redundancy even in the bypass line, avoiding any system' single point of failure.

Minimised MTTR

Parallel system availability increases with the reduction of the Mean Time To Repair (MTTR). In-frame per-module bypass fuses minimise the time it takes to re-establish a system in an event fault.

Safe Smart Battery test

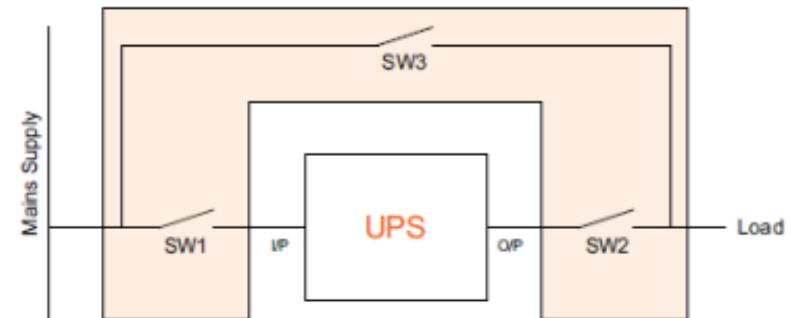
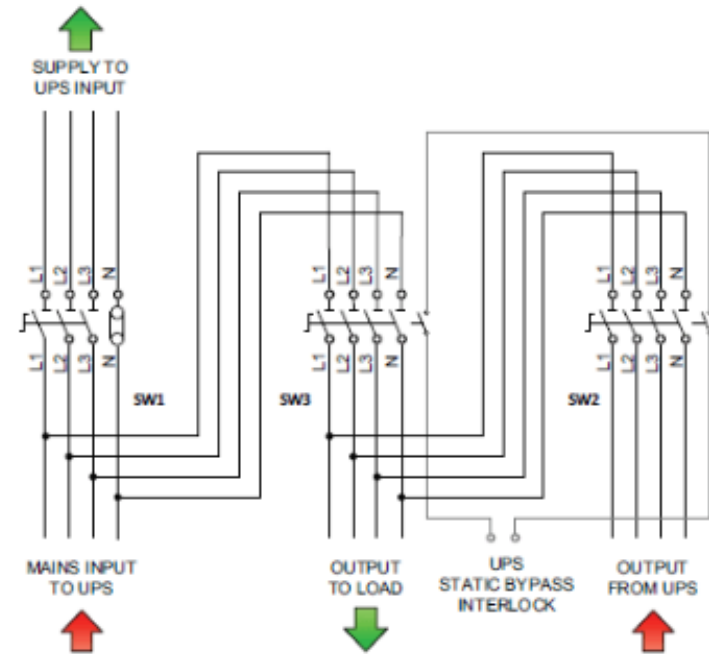
CumulusPower™ battery tests are programmable and safe. Smart Battery Booster architecture allows the UPS to perform battery monitoring, tests and health status diagnosis without the need for mains disconnection.

Hot-Swappable with minimised human error

CumulusPower™ modules can be swapped without the need to switch over the load to bypass. Individual module parallel isolators disconnect from the system, minimising human error and increasing Availability.

100kW (U.P.S Wrap-Around-Bypass)

- Bypass is a power path around a UPS system.
- An internal automatic bypass is used by the UPS to switch its load to the mains if it experiences an overload or internal failure.
- A manual, maintenance or service bypass (aka. Wrap Around Bypass) allows an engineer to isolate, maintain or remove the UPS without interrupting power to the load.



200kW (U.P.S)

The 200kW 1 x 225kW UPS N+1 with 10 Mins Autonomy

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+97.1% Efficiency
VP1

500kW (U.P.S)

The 500kW x 550kW UPS N+1 with 10 Mins Autonomy

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