Technology | Architectures solutions to increase power and availability

Solutions to meet all your needs

Different configurations make it possible to create architectures to meet the most stringent availability requirements in terms of flexibility and upgradeability.

Increasing power

• The upgrading over time of the applications supplied often requires the possibility of increasing UPS power. The configurations offered allow for this requirement so that your initial investment is saved.

Increasing availability

• To increase availability, the addition of a unit in parallel that is surplus to the power requirements of the applications (redundant) will ensure a continuous power supply, if an inverter shuts down, without resorting to a bypass.

Easy operation

- Given the criticality of applications supplied downstream from the UPS units, maintenance shutdowns are less and less feasible.
- Various different configurations have been studied specifically to deal with this operational constraint.

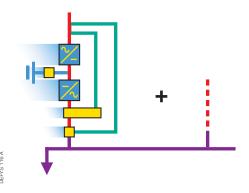
Unit architecture

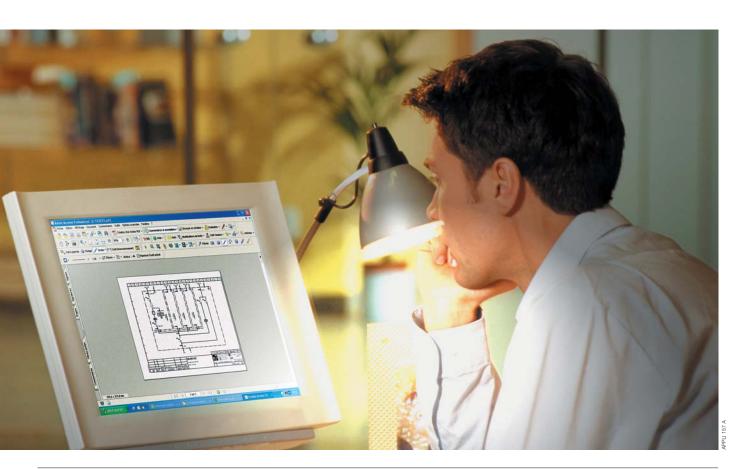
An upgradeable solution

This architecture is secured by an integrated automatic bypass, which constitutes a first level of redundancy guaranteed by the network.

The maintenance bypass function allows maintenance to be carried out without shutting down applications.

It can be the first stage of your investment, with the possibility to upgrade, as your requirements change, to a modular parallel architecture to increase power or availability (redundancy).







Horizontal modular architecture

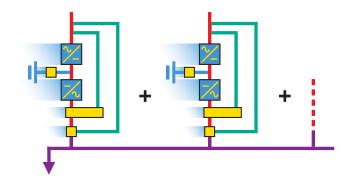
Development without constraint

This architecture is well suited to unscheduled upgrades, or upgrading in successive steps, by parallel configurations of UPS units with shared bypass.

This configuration makes it possible to increase power, it is well suited to $N\,+\,1$ redundancy.

Upgrading can be done without shutting down the installation.

Range	Maximum number of modules
MASTERYS BC	2
MASTERYS MC	6
MASTERYS IP	6
DELPHYS DS 20/60 kVA	6
DELPHYS MP	6
DELPHYS MP elite	6
DELPHYS MX	6
DELPHYS MX elite	6
DELPHYS DS 600/800 kVA	6



Vertical modular architecture

Flexible and completely modular

A new, innovative UPS concept that can adapt to all types of growth.

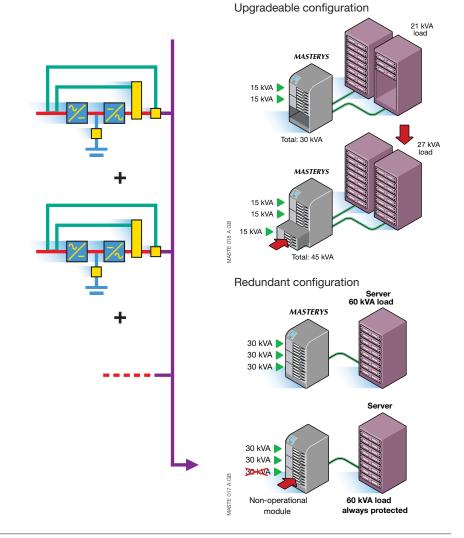
Power can be increased by successively adding modules.

The increasing of availability (redundancy) is simply carried out by adding a module to the number required to meet the power requirements for the applications.

All the modules are connectible (plug-in). Removal or adding of modules can be carried out with the system running (hot swap) without affecting the general operation of the installation.

Range	Maximum number of modules
MODULYS RM 315/330	3
MODULYS MC 415	4
MODULYS MC 430	2
MODULYS MC 645	3
MODULYS MC 660	4
MODULYS MC 660 six	3
MODULYS MC 960	4
MODULYS MC 990	4
MODULYS MC 912 six	4
MODULYS TC 360/390	3
MODULYS EB 1290	4
MODULYS EB 1212 six	4
MASTERYS EB	3 ⁽¹⁾

(1) Possibility of placing in parallel two MASTERYS EB systems comprising 3 modules.



Architecture with centralised bypass

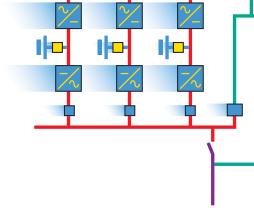
Progressive development

The ideal solution for system redundancy and planned power upgrades.

The automatic and maintenance bypass functions are centralised.

The static bypass has a high short circuit capacity.

Range	Maximum number of modules
DELPHYS MP	6
DELPHYS MP elite	6
DELPHYS MX	6
DELPHYS MX elite	6
DELPHYS DS 600/800 kVA	6



Architecture with redundant bypass

Increased availability

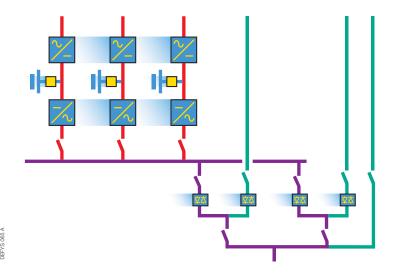
This concept has an additional fault tolerance ensured by the redundancy of the centralised bypass. It reduces the MTTR (Mean Time To Repair) of the installation.

The architecture consists of a main bypass and a bypass on "active standby".

The redundancy automatically cuts in if there is a fault with the main bypass (internal fault with the bypass, the power supply or the upstream protection).

Full installation servicing can be carried out in progressive steps, while maintaining supply to critical applications and without transfer to the maintenance bypass.

Range	Maximum number of modules	, 100 07 114
DELPHYS MP	6	
DELPHYS MP elite	6	
DELPHYS MX	6	
DELPHYS MX elite	6	
DELPHYS DS 600/800 kVA	6	



Architecture with double bypass

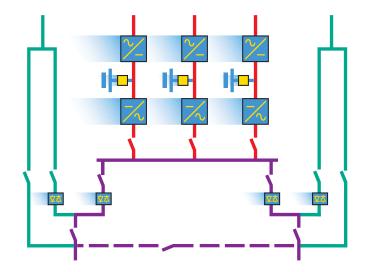
Easy operation

This configuration brings an optimised redundant power supply with two independent outputs to separate applications (for example to two computer rooms).

The UPS modules are connected in parallel with two bypasses, all of which are rated for overall power. Operation is made easier by making it possible to:

- manage two independent applications,
- upgrade easily,
- limit the risks of mutual disturbance between the loads,
- simplify maintenance of the complete system by supplying the applications through UPS.

Range	Maximum number of modules
DELPHYS MP	6
DELPHYS MP elite	6
DELPHYS MX	6
DELPHYS MX elite	6
DELPHYS DS 600/800 kVA	6



Architecture with multi bypass

Separate application groups

This configuration allows the operation of different applications to be separated and makes upgrading easier.

This unique solution consists of multiple independent bypasses.

They can either be located close to the UPS or to the supplied loads.

The multi bypass architecture allows:

- each bypass to be calibrated according to the applications downstream,
- upgrading to be carried out in stages and over time,
- selective load shedding, favouring the most critical applications,
- individual maintenance operations on each circuit.

Range	Maximum number of modules
DELPHYS MP	6
DELPHYS MP elite	6
DELPHYS MX	6
DELPHYS MX elite	6
DELPHYS DS 600/800 kVA	6

