DELPHYS Xtend GP

Real hot-scalable UPS system

Green Power 2.0 range up to 2.4 MVA/MW

Three-phase UPS

View our video to discover more

DELPHYS XTEND GP combines all the benefits of the Green Power 2.0 technology and the flexibility of a modular system and provides easy adaptation to evolving requirements, without impacting the surrounding electrical infrastructure.
DELPHYS XTEND GP is a real scalable UPS system designed to provide power scalability that can be built up with power blocks to extend the system according to the maximum power requirement.

DELPHYS XTEND GP power scalability is provided by Xmodule power blocks docked onto prewired Xbay docks. The installation and the positioning are easy with secured operation both for operators and the application. During system extensions or maintenance, the load is fully protected in online double conversion mode.

Real hot-scalable solution

- Reliable power that can be increased when needed.
- Load fully protected in VFI mode during system extensions and maintenance.
- Prewired system providing quick and safe power scalability.

Total system adaptability

- Many disposition possibilities.
- Distributed or centralised static bypass.
- Shared or distributed batteries.
- AC and DC power connections flexibility.

Optimized capital employed

- Lower initial and operating costs.
- No modification to the site's electrical infrastructure during power upgrading.
- Optimized maintenance expenditure.
- BCR (Battery Capacity Re-injection), innovative battery discharge test.

Full set of services

- Preventive maintenance.
- 24 / 7 Hot-Line and remote monitoring.
- Quick response time to site and availability of new modules.
- Cabling & docking.
- OPEX-based costing models.

The solution for

- Large data centers
- Telecommunications
- Healthcare sector
- Service sector
- Infrastructure
- Processes
- Industrial applications

Attestations and certifications

BUREAU VERITAS

DELPHYS Xtend GP Xmodule power blocks are attested by Bureau Veritas

Advantages

3 LEVEL TECHNOLOGY

HIGH EFFICIENCY

PF 1

kW = kVA

Li-Ion

Ready for Li-Ion battery

INNOVATION

Battery Capacity Re-injection

MADE IN EUROPE

Xmodule - designed to save costs

Energy performance

Based on DELPHYS GP 200 kW, the system has all the advantages of the Green Power 2.0:

- Minimised energy consumption and cooling costs in VFI mode,
- Unitary power factor provides the best €/kW ratio,
- Performance attested by Bureau Veritas.

socomec Innovative Power Solutions

Flexible UPS architecture

- Scalable power and energy storage capability.
- Distributed or centralised static bypass.
- Common or separated rectifier and bypass mains.
- Can be connected to shared or distributed batteries for energy storage optimisation.
- Compatible with different energy storage technologies.
- Systems parallelisation up to 2.4 MW

Standard electrical features

- Integrated maintenance bypass
- Backfeed protection: detection circuit.
- EBS (expert Battery System) for battery management.
- Battery temperature sensor.

Electrical options

- Extended battery charger capability.
- Compatible with different battery technologies (e.g. Li-Ion, Ni-Cd...).
- ACS synchronisation system.
- BCR (Battery Capacity Re-injection).
- FAST ECOMODE.

Standard communication features

- User-friendly 7" touch-screen multilingual colour graphic display.
- 2 slots for communication options.
- USB port to download UPS report and log file.
- Ethernet port for service purpose.

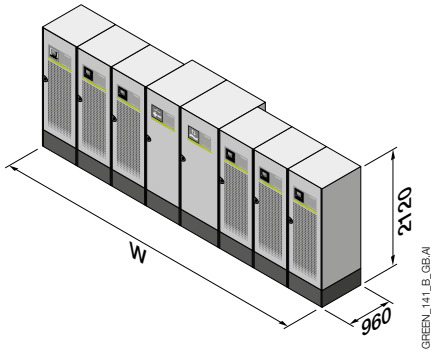
Communication options

- Dry-contact interface (configurable voltage-free contacts).
- MODBUS RTU RS485 or MODBUS TCP.
- PROFIBUS / PROFINET gateway.
- BACnet/IP interface.
- NET VISION: professional WEB/SNMP Ethernet interface for secure UPS monitoring and remote automatic shutdown.
- REMOTE VIEW PRO supervision software
- IoT gateway for Socomec cloud services and SOLIVE UPS mobile app.
- Remote touch-screen panel.
- Additional Com-slot extension.

Remote monitoring and cloud services

- LINK-UPS: Socomec 24/7 remote monitoring service connecting your installation to the nearest Socomec Service Centre.
- SOLIVE UPS: mobile app enabling the monitoring of the UPS systems from a smartphone.

Dimensions



Integration(1)	Number of Xbay dock	W (mm)
Distributed bypass (common or separated input)	4	4340
	5	5050
	6	5760

(1) For any other configuration (centralized bypass, "U" shape, "L" shape, etc.), please contact us.

Technical data

		DELPHYS Xtend GP											
SYSTEM CONFIGURATION													
Xmodule rated power		200 kVA/kW											
Number of Xbay docks		4			5				6				
Number of Xmodule power blocks (200 kVA/kW)		2	3	4	2	3	4	5	2	3	4	5	6
Power (kVA/kW)	N configuration	400	600	800	400	600	800	1000	400	600	800	1000	1200
	N+1 redundant configuration	200	400	600	200	400	600	800	200	400	600	800	1000
Max. power (systems in parallel)		up to 2400 kVA/kW (12 Xmodule)											
RECTIFIER INPUT(1)													
Voltage		400 V 3ph (200 to 480 V(2))											
Frequency		50/60 Hz											
Power factor		> 0.99											
Total harmonic distortion (THDI) at full load and rated voltage		2.5%(3)											
INVERTER													
Power factor		1 (according to IEC/EN 62040-3)											
Rated output voltage		400 V 3ph + N (380 / 415 V configurable)											
Rated output frequency		50/60 Hz (selectable)											
Harmonic voltage distortion		ThdU ≤ 1.5 % with rated linear load											
BYPASS													
Rated voltage		nominal output voltage ±15 % (settable)											
Rated frequency		50/60 Hz (selectable)											
XMODULE EFFICIENCY													
Online double conversion mode		up to 96%											
Fast EcoMode		up to 99%											
ENVIRONMENT													
Operating ambient temperature		from 10 °C up to +40(2) °C (from 15 °C to 25 °C for maximum battery life)											
Relative humidity		0 % - 95 % without condensation											
Maximum altitude		1000 m without derating (max. 3000 m)											
STANDARDS													
Safety		IEC/EN 62040-1, AS 62040.1.1, AS 62040.1.2											
EMC		IEC/EN 62040-2, AS 62040.2											
Performance		IEC/EN 62040-3, AS 62040.3											
Product declaration		CE, RCM (E2376)											

(1) IGBT rectifier. (2) Conditions apply. (3) With input THDV < 1 %.

DELPHYS Xtend GP

Three-phase UPS

Green Power 2.0 range up to 2.4 MVA/MW

An innovative way to provide scalability

AC CABINET

System input and output.

- General input(s) and output power connection.
- Centralised static bypass, if required.
- System input(s) and output[1] switches.
- Maintenance manual bypass switch[1].

DC CABINET

Prewired coupling for energy storage.

- Energy storage power and control cable connections.
- Connection of up to 6 batteries per system, with dedicated coupling switches.

Xbay

Easy power block docking.

- Each Xbay dock is prewired to AC and DC cabinets.
- Ready for Xmodule power and control cables connection.
- Includes individual switches for Xmodule AC coupling.
- Hot-plug parallel bus connection.
- The number of Xbay docks depends on the final power required (up to 6 per system).

Xmodule

Hot-scalable 200 kVA/kW power block.

- Power block ensuring load protection and battery management.
- Up to 6 Xmodule power blocks per system.
- Easy positioning.
- Dedicated switches for easy power block servicing.
- Secured installation both for operators and the application.

(1) Please consult us for systems above 1200 kVA/kW (systems in parallel).

Real hot-scalable solution

- Quick and safe scalability to meet evolving demands for energy performance.
- Reliable power that can be increased when needed to rapidly meet changing capacity demands.
- Easy adaptation to site evolutions and constraints thanks to movable blocks.
- Prewired system for additional Xmodule connection and coupling within the system.
- Standard tools required to place and connect the power block.
- Online double conversion mode for load protection during system extensions or maintenance.

1

600 kW, online double conversion mode

2

600 kW, online double conversion mode

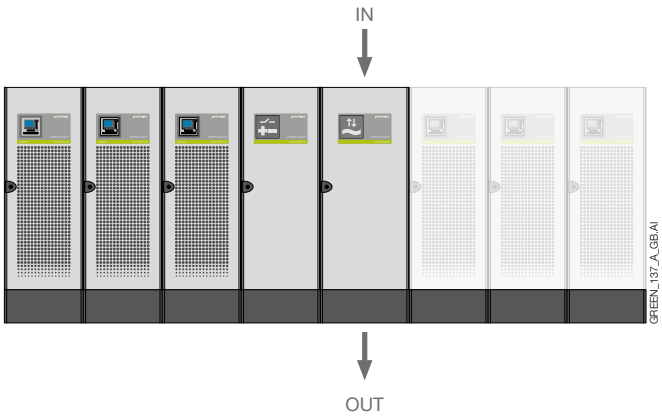
3

30 minutes later: 800 kW, online double conversion mode

socomec
Innovative Power Solutions

A complete solution

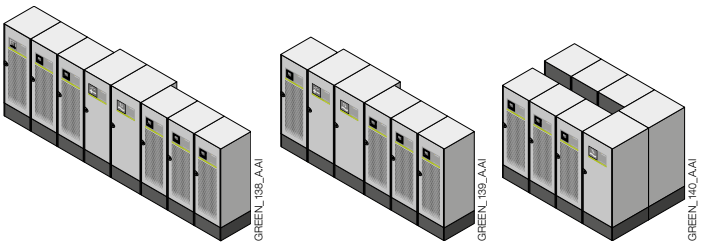
- Simplifies the In / Out switchboard. The system integrates localised coupling capability.
- Fast and cost-effective scalability as there is no need to connect the additional Xmodule power block(s) to any upstream or downstream panel.
- Keeps the critical applications protected in online double conversion mode during power extension.
- Possibility to parallelise systems up to 2400 kVA/kW (12 Xmodules).



Adaptable disposition

The system disposition and physical connection is easily adapted to your plant:

- Many disposition possibilities (Linear, “U”shaped, “L-shaped”).
- The number of Xbay docks can be 6 or fewer per system, depending on the rated power of the infrastructure.
- General input/output AC connections available for top or bottom entry.
- Back-up storage DC connection available for top or bottom entry.



Example of configurations (left to right): linear with 6 Xmodule power blocks, linear with 4 Xmodule power blocks, “U-shape” with 6 Xmodule power blocks.

Innovative battery discharge test

DELPHYS Xtend GP allows a periodical complete and safe battery discharge test without using a resistive load for the back-up time or availability check.

Battery Capacity Re-injection allows significant cost savings and reduces the TCO:

- No need to rent or buy load banks.
- Simplified infrastructure, as there are not any dedicated test bus bars.
- No wasted energy because it is re-used to supply other UPS or applications.
- Less time needed to perform the test as it is easy to programme.

The test is performed at a constant rate of power (full power or partial load). Each individual Xmodule power block is tested separately and feeds back the energy stored in the battery.

The energy to be fed back upstream through the rectifier will correspond to the difference between the discharged power and the load consumption.

Example of a battery discharge test.

The test is performed on the 4th Xmodule power block at 200 kW constant power.