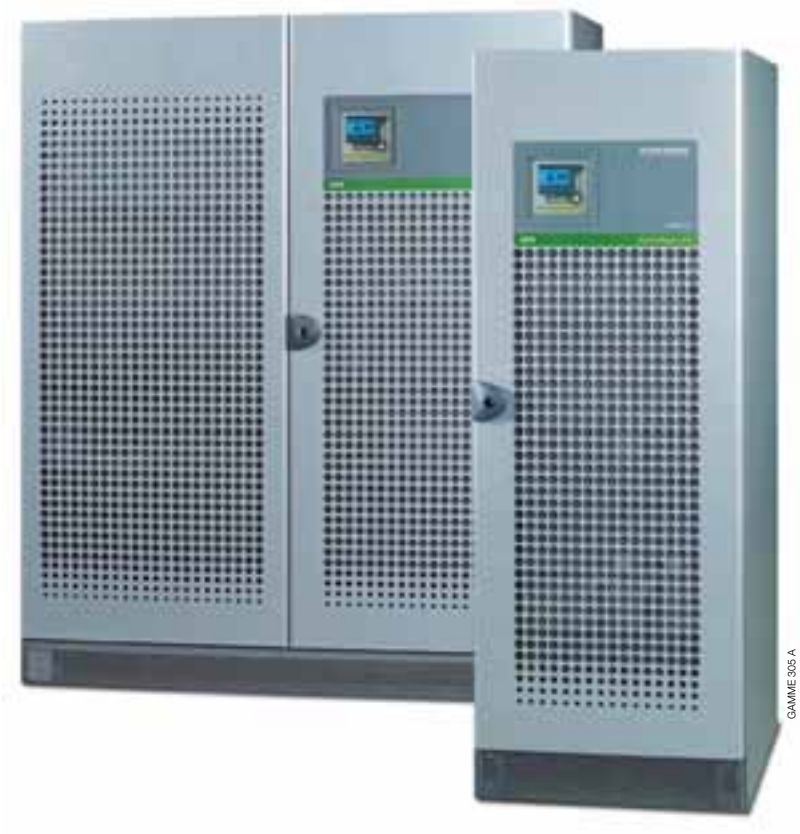
DELPHYS GP

High-efficiency protection without compromise

Green Power 2.0 range from 160 to 800 kVA/kW



The solution for

- Data centres
- Telecommunications
- Healthcare sector
- Service sector
- Infrastructure
- Industrial applications

Attestations and certifications

BUREAU VERITAS

DELPHYS GP is attested by Bureau Veritas

Advantages

3 LEVEL

96%

PF 1

kW = kVA

Flywheel COMPATIBLE

INNOVATION

Battery Capacity Re-injection

Better performance than the EU Code of Conduct on efficiency of AC UPS

Energy saving + Full rated power = reduced TCO

Energy saving: high efficiency without compromise

- Offers the highest efficiency in the market using VFI – Double Conversion Mode, the only UPS working-mode that assures total load protection against all mains quality problems.
- Ultra high efficiency output independently tested and verified by an international certification organization in a wide range of load and voltage operating condition.
- Ultra high efficiency in VFI mode is provided by an innovative topology (3-Level technology) that has been developed for all the Green Power 2.0 UPS ranges.

Full rated power: kW=kVA

- No power downgrading when supplying the latest generation of servers (leading or unity power factor).
- Real full power, according to IEC 62040: kW=kVA (unity power factor design) means 25% more active power available compared to legacy UPS.
- Suitable also for leading power factor loads down to 0.9 without apparent power derating.

Significant cost-saving (TCO)

- Maximum energy saving thanks to 96% efficiency in true double conversion mode: 50% saving on energy losses compared to legacy UPS gives significant savings in energy bill.
- Up to 99% efficiency with FAST ECOMODE.
- UPS "self-paying" with energy saving.
- Energy Saver mode for global efficiency improvement on parallel systems.
- kW=kVA means maximum power available with the same UPS rating: no overdesign cost and therefore less €/kW.
- Upstream infrastructure cost optimization (sources and distribution), thanks to high performance IGBT rectifier.
- Extended battery life and performance:
  - long life battery,
  - very wide input voltage and frequency acceptance, without battery use.
- EBS (Expert Battery System) charging management improves battery service life.
- BCR (Battery Capacity Re-injection) removes the constraints of using an additional load bank for the battery discharge test: it consists in re-injecting the energy stored in the batteries to other applications.

Parallel systems

To fulfil the most demanding needs for power supply availability, flexibility and the installation to be upgraded.

- Modular parallel configurations up to 4 MW, development without constraint.
- Distributed or centralized bypass flexibility to ensure a perfect compatibility with the electrical infrastructure.
- Twin channel architecture with Static Transfer Systems.
- Distributed or shared battery for energy storage optimization on parallel systems.

Standard electrical features

- Integrated maintenance bypass for single unit (and 1+1 system).
- Backfeed protection: detection circuit.
- EBS (Expert Battery System) for battery management.
- Redundant cooling.
- Battery temperature sensor.

Electrical options

- Seperated or common input mains.
- External maintenance bypass.
- Extended battery charger capability.
- Shared battery.
- Flywheel compatible.
- Galvanic isolation transformer.
- Backfeed isolation device.
- ACS synchronisation system.
- BCR (Battery Capacity Re-injection).
- FAST ECOMODE.

Standard communication features

- User-friendly multilingual interface with graphic display.
- 2 slots for communication options.
- Ethernet connection (WEB/SNMP/email).
- USB port for event log access.

Communication options

- Advanced server shutdown options for stand-alone and virtual servers.
- 4 additional slots for communication options.
- ADC interface (configurable voltage-free contacts).
- MODBUS TCP.
- MODBUS RTU.
- BACnet/IP interface.

Remote monitoring service

- LINK-UPS, remote monitoring service that connects your UPS to your Critical Power specialist 24/7.

Technical data

		DELPHYS GP							
Sn [kVA]		160	200	250	320	400	500	600	800
Pn [kW]		160	200	250	320	400	500	600	800
Input / output		3/3							
Parallel configuration		up to 4 MW							
INPUT									
Rated voltage		400 V 3ph							
Voltage tolerance		200 V to 480 V (1)							
Rated frequency		50/60 Hz							
Frequency tolerance		± 10 Hz							
Power factor / THDI		> 0.99 / < 2.5% (3)							
OUTPUT									
Power factor		1 (according to IEC/EN 62040-3)							
Rated voltage		3ph + N 400 V							
Voltage tolerance static load		±1 % dynamic load in accordance with VFI-SS-111							
Rated frequency		50/60 Hz							
Frequency tolerance		± 2% (configurable for GenSet compatibility)							
Total output voltage distortion linear load		ThdU < 1.5%							
Total output voltage distortion non-linear load (IEC 62043-3)		ThdU < 3%							
Short-circuit current(2)		up to 3.4 x In							
BYPASS									
Rated voltage		rated output voltage							
Voltage tolerance		± 15% (configurable from 10% to 20%)							
Rated frequency		50/60 Hz							
Frequency tolerance		± 2% (configurable for GenSet compatibility)							
EFFICIENCY									
Online mode @ 40 % of load		up to 96%							
Online mode @ 75 % of load		up to 96%							
Online mode @ 100 % of load		up to 96%							
Fast EcoMode		up to 99%							
ENVIRONMENT									
Operating ambient temperature		from 10 °C up to +40 (1) °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)							
Acoustic level at 1 m (ISO 3746)		< 65 dBA	< 67 dBA	< 70 dBA	< 68 dBA	< 70 dBA	< 72 dBA		< 74 dBA
UPS CABINET									
Dimensions	W	700 mm		1000 mm	1400 mm		1600 mm	2800 mm	3700 mm
	D	800 mm		950 mm	800 mm		950 mm	950 mm	
	H	1930 mm						2060 mm	
Weight		470 kg	490 kg	850 kg	980 kg	1000 kg	1500 kg	2300 kg	3400 kg
Degree of protection		IP20 (other IP as option)							
Colours		cabinet: RAL 7012, door: silver grey							
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) Conditions apply. (2) Worst condition (Auxiliary Mains not available). (3) With input THDV < 1%.