



Green Power 2.0

DELPHYS GP from 160 to 500 kVA/kW

ultra high energy efficiency and maximum power availability up to 4 MW

Three-phase UPS



The solution for

- > Data centres
- > Telecommunications
- > Service sector
- > IT Networks / Infrastructures

Attestations



BUREAU VERITAS
Green Power 2.0 is attested by Bureau Veritas

Advantages



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 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.
- BHC INTERACTIVE: Accurate battery monitoring with UPS interactivity for even more prolonged service life.

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

- Dual input mains.
- Integrated maintenance bypass.
- Backfeed protection: detection circuit.
- EBS (Expert Battery System) for battery management.
- Redundant cooling.
- Battery temperature sensor.

Electrical options

- External maintenance bypass.
- Extended battery charger capability.
- Shared battery.
- Flywheel compatible.
- Galvanic isolation transformer.
- Backfeed isolation device.
- ACS synchronisation system.
- BHC INTERACTIVE.
- FAST ECOMODE.

Technical data

DELPHYS GP						
Sn [kVA]	160	200	250	320	400	500
Pn [kW]	160	200	250	320	400	500
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% ⁽²⁾					
OUTPUT						
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	up to 3.4 x In					
Overload	125% for 10 minutes, 150% for 1 minute ⁽¹⁾					
Crest factor	3:1					
BYPASS						
Rated voltage	rated output voltage					
Voltage tolerance	± 15% (configurable with 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
UPS CABINET						
Dimensions	W	700 mm	1000 mm	1400 mm	1600 mm	
	D	800 mm	950 mm	800 mm	950 mm	
	H	1930 mm				
Weight	470 kg	490 kg	850 kg	980 kg	1000 kg	1500 kg
Degree of protection	IP20 (other IP as option)					
Colours	cabinet: RAL 7012, door: silver grey					
STANDARDS						
Safety	EN 62040-1, EN 60950-1					
EMC	EN 62040-2					
Performance	EN 62040-3 (VFI-SS-111)					
Product declaration	CE					

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

Standard communication features

- User-friendly multilingual interface with graphic display.
- 2 slots for communication options.
- RS232 serial port for modem.
- Ethernet connection (WEB/SNMP/MODBUS TCP/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/JBUS RTU.
- BACnet/IP interface.
- SMS alert.

Remote monitoring service

- Remote mobile and web-based surveillance service connected 24/7 to your local Socomec Service Centre.