

# 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

<b>DELPHYS GP</b>						
Sn [kVA]	160	200	250	320	400	500
Ph [kW]	160	200	250	320	400	500
Input/output	3/3					
Parallel configuration	up to 4 MW					
<b>INPUT</b>						
Rated voltage	400 V 3ph					
Voltage tolerance	200 V to 480 V <sup>(1)</sup>					
Rated frequency	50/60 Hz					
Frequency tolerance	± 10 Hz					
Power factor / THDI	> 0.99 / < 2.5% <sup>(2)</sup>					
<b>OUTPUT</b>						
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 <sup>(1)</sup>					
Crest factor	3:1					
<b>BYPASS</b>						
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)					
<b>EFFICIENCY</b>						
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%					
<b>ENVIRONMENT</b>						
Operating ambient temperature	from 10 °C up to +40 <sup>(1)</sup> °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
<b>UPS CABINET</b>						
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					
<b>STANDARDS</b>						
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.