

DELPHYS GP

High-efficiency protection without compromise
from 160 to 800 kVA/kW

Superior



GAMME 739/PSD

Energy saving + Full rated power = reduced TCO

Function

The Delphys Green Power range is a monolithic UPS solution designed to meet performance and service continuity requirements.

Scalable up to 4MW, the Delphys GP covers a wide range of power which has proven itself to the most demanding customers in different types of high criticality applications.

Advantages

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 and 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.

The solution for

- > Healthcare
- > Industry

Strong points

- > Energy saving: high efficiency without compromise
- > Full rated power: kW=kVA
- > Significant cost-saving (TCO)

Conformity to standards

- > IEC/EN 62040-1
- > AS 62040.1.1
- > AS 62040.1.2
- > IEC/EN 62040-2
- > AS 62040,2
- > IEC/EN 62040-3
- > AS 62040,3
- > CE, RCM (E2376)

Certifications and attestations



BUREAU VERITAS
DELPHYS GP is attested by Bureau Veritas



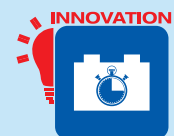
VIRLAB
DELPHYS GP 160, 200 and 500 kVA/kW are seismic certified by Virlab



Advantages



Ready for Li-Ion battery



Battery Capacity Re-injection

Parallel systems

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

- Modular parallel configurations up to 4MW, 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.

General characteristics

- 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

- Separated or common input mains.
- External maintenance bypass.
- Extended battery charger capability.
- Shared battery.
- Compatible with different battery technologies (e.g. Li-Ion, Ni-Cd...).
- Galvanic isolation transformer.
- Backfeed isolation device.
- ACS synchronisation system.
- BCR (Battery Capacity Re-injection).
- FAST ECOMODE.

Technical data

DELPHYS GP									
Sn [kVA]	160	200	250	300	400	500	600	800	1000
Pn [kW]	160	200	250	300	400	500	600	800	1000
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 62040-3)	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 0 °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	< 72 dBA	< 74 dBA				
UPS CABINET									
Dimensions	W	700 mm	1000 mm	1400 mm	1600 mm	2800 mm	3510 mm	3910 mm	
	D	800 mm	950 mm	800 mm	950 mm	950 mm			
	H	1930 mm				2060 mm			
Weight	470 kg	490 kg	850 kg	900 kg	1000 kg	1500 kg	2300 kg	2800 kg	3850 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								
Seismic compliance ⁽⁴⁾	Uniform Building Code UBC-1997, EN 60068-3-3/1993 (seismic), EN 60068-2-6/2008 (sinusoidal), EN 60068-2-47/2005 (mounting).								
Product declaration	CE, RoHS (E2376), UKCA								

(1) Conditions apply. (2) Worst condition (Auxiliary Mains not available). (3) With input THDI < 1%. (4) 160, 200 and 500 kVA/kW models.

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 voltagefree 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

- SoLink: 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.

Expert services

We offer services to ensure your UPS highest availability:

- > Commissioning
- > On-site intervention
- > Preventive maintenance visits
- > 24-hour call out and rapid on-site repairs
- > Maintenance packages
- > Training



www.socomec.com/services