# DELPHYS GP

# High-efficiency protection without compromise

from 160 to 1000 kVA/kW



# **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.

#### The solution for

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

#### Attestations and certifications





#### **Advantages**













#### Our dedicated Expert Services for UPS

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



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#### 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.

#### 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.
- 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.

# Standard communication features

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

- 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.

## 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						-p	-			
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% (3)									
OUTPUT										
Power factor				1	(accordi	na to IEC/EI	N 62040-3	)		
Rated voltage	1 (according to IEC/EN 62040-3) 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 <sup>(2)</sup>					ι	ip to 3.4 x	ln			
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	
	Н			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				ca	binet: RAL	. 7012, dod	r: silver gr	ey		
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 <sup>(4)</sup>	Uniform Building Code UBC-1997, EN 60068-3-3/1993 (seismic),									
Colonia compilance.		EN 60068-2-6/2008 (sinusoidal), EN 60068-2-47/2005 (mounting).								

CE, RCM (E2376) (1) Conditions apply. (2) Worst condition (Auxiliary Mains not available). (3) With input THDV < 1%. (4) 160, 200 and 500 kVA/kW models.



Product declaration