

## Green Power 2.0

### DELPHYS GP from 160 to 500 kVA/kW

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



## 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

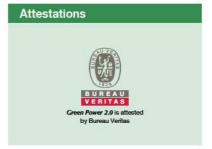
- No power downgrading when supplying the latest generation of servers (leading or unity power factor).
- Real full power, according to IEC 62040: kW=kVA (unity power factor design) means 25% more active power available compared to legacy UPS.
- Suitable also for leading power factor loads down to 0.9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

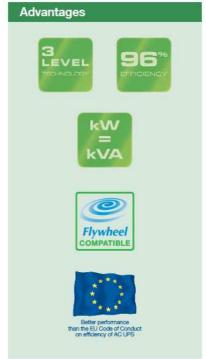
#### Significant cost-saving (TCO)

- 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.

#### The solution for

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







#### 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

- 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,

# 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.

#### Technical data

		DELPHYS GP					
Sn [kVA]		160	200	250	320	400	500
Pn [kW]		160	200	250	320	400	500
Input/output				3/			
Parallel configuration		up to 4 MW					
INPUT	-			up to			
Rated voltage	- 1			400 V	3nh		
Voltage tolerance		200 V to 480 V (*)					
Rated frequency		50/60 Hz					
Frequency tolerance		± 10 Hz					
Power factor / THDI		± 10 Hz > 0.99/< 2.5% ™					
OUTPUT				>0.337<	2.370 ~		
	i			2-L N	400 V		
Rated voltage		3ph + N 400 V					
Voltage tolerance static load		±1 % dynamic load in accordance with VFI-SS-111 50/60 Hz					
Rated frequency			. 00/			ELELA	
Frequency tolerance Total output voltage distortion		± 2% (configurable for GenSet compatibility)  ThdU < 1.5%					
linear load Total output voltage distortion		ThdU < 3%					
non-linear load (IEC 62043-3) Short-circuit current		up to 3.4 x ln					
Overload		125% for 10 minutes, 150% for 1 minute (1)					
Crest factor		3:1					
BYPASS	- '						
Rated voltage	1			rated outpu	ıt voltane		
Voltage tolerance		rated output voltage ± 15% (configurable with from 10% to 20%)					
Rated frequency		50/60 Hz					
Frequency tolerance		± 2% (configurable for GenSet compatibility)					
EFFICIENCY			12%	(configurable for	donoct compa	ubiiity)	
Online mode @ 40 % o	of load			unto	96%		
Online mode @ 75% of load		up to 96% up to 96%					
Online mode @ 100% of load		up to 96%					
Fast EcoMode		up to 99%					
ENVIRONMENT				up to	JJ 70		
	noraturo I	fre	m 10°Cup to .	40 (I) °C (from 15 °	C to DE °C for m	ovimum battoni li	ifo)
Operating ambient temperature Relative humidity		from 10 °C up to +40 °0 °C (from 15 °C to 25 °C for maximum battery life)  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 dB					
UPS CABINET	00 31 101	COURT	COLUDA	( TO GEN	C OU GUA	(70 dbA	\ 12 UL
OF S CADINET	w	700	mm	1000 mm	140	) mm	1600 m
Dimensions	D	800		950 mm		) mm	950 mr
	H	000	HHHS	1930		/ IIIIII	930 1111
Weight	75 A	470 kg	490 kg	850 kg	980 kg	1000 kg	1500 k
Degree of protection		IP20 (other IP as option)					
Colours			C	abinet: RAL 7012		ev	
STANDARDS	- 1				3.	,	
Safety	i i			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%.