

# Green Power 2.0

UPS up to 4 MW

High availability and power quality solutions for business continuity



# Maximum availability, without compromise!

Business continuity is a crucial aspect in datacentre infrastructures where availability must be ensured 24/7/365 to avoid data losses and downtime of company operations. We offer you fail-safe solutions using the most advanced expertise and cutting-edge technologies because we know what you have at stake.



## Manage data centre evolution without affecting power availability

Critical buildings are faced with constant evolutions in energy demands. These electrical infrastructures need to be adaptable to business strategy development, to service level agreement evolution and to the impacts of IT innovations.

## Reduce Cost of Ownership

As an environmentally responsible company you are naturally concerned about life cycle costs and carbon footprint reduction in your installation. Energy cost and floor space are expensive and will increase over the years.

At the same time, incentive programmes linked to the reduction of greenhouse gas emissions will naturally encourage the choice of high energy-efficient solutions.

## The SOCOMEC solutions

SOCOMEK offers you innovative solutions designed to ensure the continuity of your business applications allowing you to reduce the electrical infrastructure's total cost of ownership and to adopt a sustainable development approach.

## Best practice award



*"With its range of Green Power UPS solutions, Socomec maximizes efficiency and ensures the highest levels of protection. It continuously strives to enhance customer value by providing products that are excellent in terms of performance and have a low total cost of ownership".*

Frost & Sullivan recognizes Socomec's long term commitment to develop truly innovative products for increasingly demanding critical power applications. The Green Power UPS solutions comply with the most stringent environmental protection standards without compromising on performance - even for the most challenging applications.

# A specialist at your disposal

Innovative bespoke solutions for your specific needs, support service to assess the capability of your data centre, after sales support throughout the entire life cycle of your equipment.

## High Availability

## Agility

## Cost Saving



### EXPERTISE

- Business continuity
- Power management
- Power quality



### SERVICE

- Project and consultancy partnership
- Plant care
- 24/7/365 monitoring and fast response to site



### SOLUTIONS

- Customized systems
- Cutting-edge technology
- Eco-friendly

## High Availability

How does SOCOMEC ensure high availability and business continuity to your mission-critical applications?

- By **assuring** total load protection by working in true online double conversion and with high UPS performances meeting your installation and load requirements.
- By **protecting** your business using the appropriated solution and fault-tolerant design.
- By accurate **monitoring** of UPS and energy storage availability.

## Agility

How does SOCOMEC let your IT infrastructures grow without affecting availability and with no risk of downtime?

- By **designing** innovative solutions for data centre infrastructures facing continuous changes.
- By **adapting** the UPS and the energy distribution architectures.
- By **providing** flexible energy storage solutions.

## Cost Saving

How does SOCOMEC help you to increase profitability, lower costs and be environmentally friendly?

- With **energy efficiency solutions** allowing reduction of energy losses.
- With **solutions** avoiding overdesign costs.
- With optimized **energy storage solutions**.

### SOCOMEK, your best asset

SOCOMEK is an industrial group specialising in the **availability**, **control** and **safety** of low voltage electrical energy. The long experience in UPS design with thousands of medium and large power systems supplying critical

IT loads makes SOCOMEC one of the leaders in **high power UPS solutions**.

As a recognised expert in critical power, SOCOMEC is the **only contact** you need, offering everything from technical analysis

to implementation of a solution perfectly **adapted** to your needs. As a leader in power availability, SOCOMEC is here to provide you the best **technical support** to **reduce** your consumption and improve the **quality** of your energy.

ENERGY  
SPECIALIST  
SINCE 1922



# Green Power 2.0

High energy efficiency and power availability

The SOCOMECS Green Power 2.0 UPS range combines unbeatable energy efficiency with unity power factor to give you the ultimate critical power solution for data centre availability. And along with our range of STS, energy storage and monitoring solutions you have all the means to prevent faults, supervise your system, lower costs and reduce CO<sub>2</sub> emissions.



GAMME 288 A



*Green Power 2.0 efficiency is independently attested by Bureau Veritas in all operating conditions, from partial to full load and with different types of loads.*

## Running cost savings

- 96% efficiency in online double conversion mode thanks to 3-level technology.
- UPS efficiency designed to minimize losses at full and partial load.
- Energy Saver, embedded power management reducing online protection losses on parallel systems.
- Long life battery solutions.
- Wide rectifier input voltage and frequency tolerances minimize battery use and ageing.
- EBS (Expert Battery System) for energy storage lifetime improvement.

## System cost savings

- Full rated UPS supplies more blade servers and the latest generation of power supplies which are forcing leading or unity power factor.
- Real full power according to IEC 62040: kW=kVA (unity power factor) means 25% more active power available compared to legacy UPS.
- Small footprint for space saving with a very high power density.
- Upstream infrastructure cost optimization, thanks to high performance IGBT rectifier: input power factor >0.99, sinewave absorption current, soft start function and neutral connection-free rectifier.

## Advantages



## Dynamic energy storage solutions

### Do you need an acid-free solution?

FLYWHEEL, a dynamic energy storage solution, removes restrictions linked to traditional battery use.

Among its features, it provides outstanding reliability, quick recharging, easy installation, reduced and simplified maintenance and a lifetime of more than 20 years.

# The ultimate adapted solutions

Maximum availability

Agility

Cost saving



- True online double conversion
- Total load protection
- Fault-tolerant UPS design

- Batteries and acid-free energy storage solutions
- Distributed or shared connections
- BHC interactive


- Redundant power supply
- Double bus architecture
- No load fault propagation

- N+1 redundancy
- Architectures adaptable to any requirement


# Technical specifications

Green Power 2.0 from 10 to 500 kVA/kW is the ultimate UPS solution for ensuring business continuity to mission-critical infrastructures.

DELPHYS GP 160-500 kVA/kW is the high power offer of Green Power 2.0 UPS range allowing maximum availability and power protection up to 4 MW.






Real unity output power factor in VFI-SS-111 mode: 25% active power compared to legacy UPS design.



96% online efficiency, independently attested in all real operating conditions.

**SOCOMEC for sustainability**

- Green Power 2.0 already meets 2014 Code of Conduct requirements for UPS energy efficiency for data centres.
- Voluntary approach with Product Environmental Profile (PEP) passport availability.
- Reduction in energy consumption by using re-injective loads for manufacturing and factory tests (carbon emissions reduced by 90%).
- Low carbon footprint.

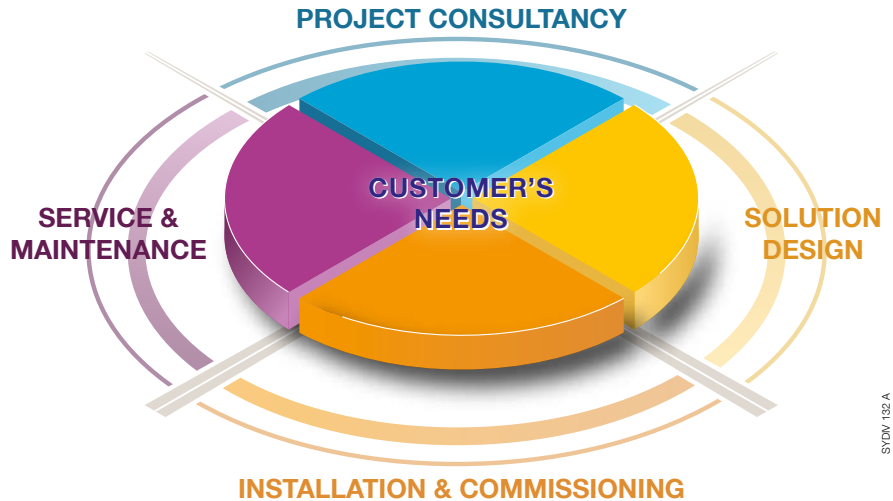
## Technical data

<b>DELPHYS GP</b>				
Sn [kVA]	160	200	250 <b>new</b>	320
Pn [kW]	160	200	250 <b>new</b>	320
Input/output	3/3			
Parallel configuration	up to 4 MW			
<b>INPUT</b>				
Voltage	400 V 3ph (200 V to 480 V) <sup>(1)</sup>			
Frequency	50/60 Hz ±10 Hz			
Power factor / THDI	> 0.99 / < 2.5% <sup>(2)</sup>			
<b>OUTPUT</b>				
Rated voltage	3ph + N 400 V ±1% dynamic load in accordance with VFI-SS-111			
Frequency	50/60 Hz ±2% (configurable for GenSet compatibility)			
Total output voltage distortion	ThdU < 1,5% (linear load), < 3% (non-linear load according IEC 62040-3)			
Short-circuit current	up to 3.4 x I <sub>n</sub>			
Overload	125% for 10 minutes, 150% for 1 minute <sup>(1)</sup>			
Crest factor	3:1			
<b>BYPASS</b>				
Rated voltage	rated output voltage ±15% (configurable with from 10% to 20%)			
Rated frequency	50/60 Hz ±2% (configurable for GenSet compatibility)			
<b>EFFICIENCY</b>				
Online double conversion mode	up to 96%			
Fast EcoMode	up to 99%			
<b>COMMUNICATION</b>				
Interfaces	Slots for communication options, RS232 serial port for modem, Ethernet connection (WEB/SNMP/MODBUS TCP/email), USB port for event log access, Advanced server shutdown options, ADC interface, Profibus, SMS alert, Bacnet.			
<b>UPS CABINET</b>				
Dimensions W x D x H	700 x 800 x 1930 mm	1000 x 950 x 1930 mm	1400 x 800 x 1930 mm	1600 x 950 x 1930 mm
Degree of protection	IP20 (other IP as option)			
<b>STANDARDS</b>				
Safety	EN 62040-1, EN 60950-1			
EMC	EN 62040-2			
Performance	EN 62040-3 (VFI-SS-111)			

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

# An experienced manufacturer at your service

SOCOMEC has a worldwide network of close-to-site specialist UPS engineers dedicated to guarantee business continuity in the most demanding critical power applications.



## Our experience for your right solution

- Understanding of your needs to maintain the availability of high quality energy, whether it is a new plant or a renewal.
- Ability to customize your plant according to your specific requirements
- Adapted protection level and architecture solutions.

## Project consultancy

- Reliable, efficient, safe plant design and implementation
- Energy efficiency assessments and power quality audits.
- Infrared analysis.

## Testing, Commissioning and Training

- Factory acceptance tests or on-site performance validation.
- Installation and commissioning certification.
- Complete product training offer.

## Maintenance programme

- Comprehensive maintenance programmes.
- Rapid response engineering team available 24/7/365.
- Dedicated factory spare-parts stock.
- Lean techniques to reduce MTTR.

### Power, Control & Safety and Energy Efficiency solutions

#### Managing power and protecting individuals & property

As a leading manufacturer of power switching and changeover products, SOCOMEC also offers solutions for fuse protection, electronic protection and insulation control.

Take advantage of a leading manufacturer's expertise for:

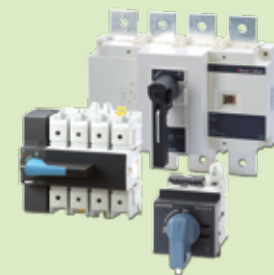
- secured high quality energy continuity,
- protection of personnel & assets,
- optimal electrical networks.

We offer standard or tailor-made solutions and specialized services that are adapted to all your applications.

#### Managing your energy costs

Power consumption measuring, getting the best tariffs, verifying energy bills, limiting reactive energy... These are the real stakes for your installation's energy performance!

We offer the best-designed solutions (instrumentation, software packages and services) to help you get concrete and durable results.



SYDV\_132\_A

GAMME 242\_A

GAMME 268\_A

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## YOUR DISTRIBUTOR



[www.socomec.com](http://www.socomec.com)

