

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 CO₂ 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 800 kVA/kW is the ultimate UPS solution for ensuring business continuity to mission-critical infrastructures.

DELPHYS GP 160-800 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.





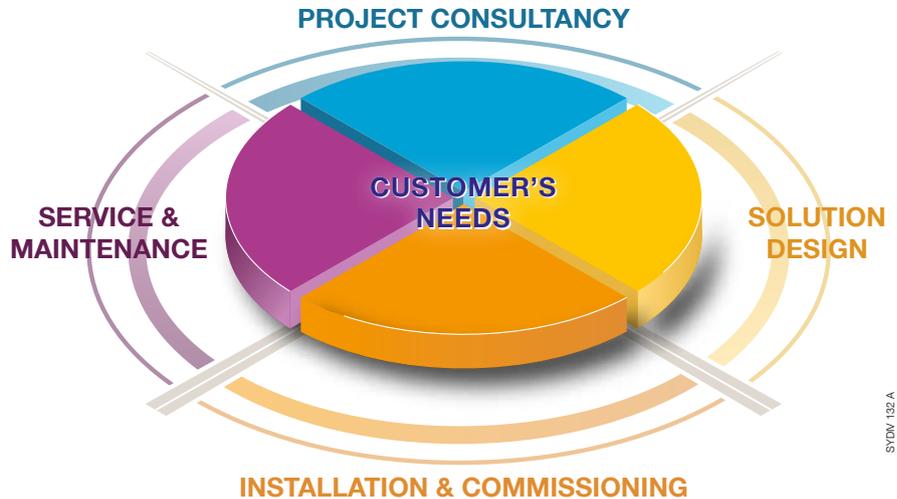
Technical data

		DELPHYS GP							
Sn [kVA]	Pn [kW]	160	200	250	320	400	500	600	800
		160	200	250	320	400	500	600	800
Input/output		3/3							
Parallel configuration		up to 4 MW							
INPUT									
Voltage		400 V 3ph (200 V to 480 V) ⁽¹⁾							
Frequency		50/60 Hz ±10 Hz							
Power factor / THDI		> 0.99 / < 2.5% ⁽²⁾							
OUTPUT									
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 In							
Overload		125% for 10 minutes, 150% for 1 minute ⁽¹⁾							
Crest factor		3:1							
BYPASS									
Rated voltage		rated output voltage ±15% (configurable with from 10% to 20%)							
Rated frequency		50/60 Hz ±2% (configurable for GenSet compatibility)							
EFFICIENCY									
Online double conversion mode		up to 96%							
Fast EcoMode		up to 99%							
COMMUNICATION									
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.							
UPS CABINET									
Dimensions W x D x H (mm)		700 x 800 x 1930	1000 x 950 x 1930	1400 x 800 x 1930	1600 x 950 x 1930	3700 x 950 x 2060			
Degree of protection		IP20 (other IP as option)							
STANDARDS									
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, SOCOME C 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

Socomec worldwide

IN EUROPE

BELGIUM

Critical Power / Power Control & Safety /
Energy Efficiency / Solar Power Power

Tel. +32 2 340 02 30
Fax +32 2 346 28 99
info.be@socomec.com

FRANCE

Critical Power / Power Control & Safety /
Energy Efficiency / Solar Power

Tel. +33 1 45 14 63 00
Fax +33 1 48 67 31 12
dcm.ups.fr@socomec.com

GERMANY

Critical Power

Tel. +49 621 71 68 40
Fax +49 621 71 68 444
info.ups.de@socomec.com

Power Control & Safety / Energy Efficiency

Tel. +49 7243 65292 0
Fax +49 7243 65292 13
info.scp.de@socomec.com

ITALY

Critical Power

Tel. +39 02 98 242 942
Fax +39 02 98 240 723
info.ups.it@socomec.com

Power Control & Safety / Energy Efficiency

Tel. +39 02 98 49 821
Fax +39 02 98 24 33 10
info.scp.it@socomec.com

Solar Power

Tel. +39 0444 598611
Fax +39 0444 598627
info.solar.it@socomec.com

NETHERLANDS

Critical Power / Power Control & Safety /
Energy Efficiency / Solar Power

Tel. +31 30 760 0900
Fax +31 30 637 2166
info.nl@socomec.com

POLAND

Critical Power

Tel. +48 22 825 73 60
Fax. +48 22 825 73 60
info.ups.pl@socomec.com

Power Control & Safety / Energy Efficiency

Tel. +48 91 442 64 11
Fax +48 91 442 64 19
info.scp.pl@socomec.com

PORTUGAL

Critical Power / Power Control & Safety /
Energy Efficiency / Solar Power

Tel. +351 261 812 599
Fax +351 261 812 570
info.ups.pt@socomec.com

ROMANIA

Critical Power / Power Control & Safety /
Energy Efficiency / Solar Power

Tel. +40 21 319 36 88
Fax +40 21 319 36 89
info.ro@socomec.com

RUSSIA

Critical Power / Power Control & Safety /
Energy Efficiency / Solar Power

Tel. +7 495 775 19 85
Fax +7 495 775 19 85
info.ru@socomec.com

SLOVENIA

Critical Power / Power Control & Safety /
Energy Efficiency / Solar Power

Tel. +386 1 5807 860
Fax +386 1 561 11 73
info.si@socomec.com

SPAIN

Critical Power / Power Control & Safety /
Energy Efficiency / Solar Power

Tel. +34 93 540 75 75
Fax +34 93 540 75 76
info.es@socomec.com

TURKEY

Critical Power / Power Control & Safety /
Energy Efficiency / Solar Power

Tel. +90 216 540 71 20-21-22
Fax +90 216 540 71 27
info.tr@socomec.com

UNITED KINGDOM

Critical Power

Tel. +44 1285 863 300
Fax +44 1285 862 304
info.ups.uk@socomec.com

Power Control & Safety / Energy Efficiency

Tel. +44 1462 440 033
Fax +44 1462 431 143
info.scp.uk@socomec.com

IN ASIA PACIFIC

AUSTRALIA

Critical Power / Power Control & Safety

Tel. +61 2 9325 3900
Fax +61 2 9888 9544
info.ups.au@socomec.com

CHINA

Critical Power / Power Control & Safety /
Energy Efficiency

Tel. +86 21 52 98 95 55
Fax +86 21 62 28 34 68
info.cn@socomec.com

INDIA

Critical Power / Solar Power

Tel. +91 44 39215400
Fax +91 44 39215450 & 51
info.ups.in@socomec.com
info.solar.in@socomec.com

Power Control & Safety / Energy Efficiency

Tel. +91 124 4027210
Fax +91 124 4562738
info.scp.in@socomec.com

SINGAPORE

Critical Power / Power Control & Safety /
Energy Efficiency

Tel. +65 6506 7600
Fax +65 64 58 7377
info.sg@socomec.com

THAILAND

Critical Power

Tel. +66 2 941 1644 7
Fax +66 2 941 1650
info.ups.th@socomec.com

VIETNAM

Critical Power

Tel. +84 8 3559 1220
Fax +84 8 3559 1221
info.ups.vn@socomec.com

IN MIDDLE EAST

UNITED ARAB EMIRATES

Critical Power / Power Control & Safety /
Energy Efficiency / Solar Power

Tel. +971 4 29 98 441
Fax +971 4 29 98 449
info.ae@socomec.com

IN AMERICA

USA, CANADA & MEXICO

Power Control & Safety / Energy Efficiency

Tel. +1 617 245 0447
Fax +1 617 245 0437
info.us@socomec.com

OTHER COUNTRIES

NORTH AFRICA

Algeria / Morocco / Tunisia
info.naf@socomec.com

AFRICA

Other countries
info.africa@socomec.com

SOUTH EUROPE

Cyprus / Greece / Israel / Malta
info.se@socomec.com

SOUTH AMERICA

Tel. +34 93 540 75 75
info.es@socomec.com

MORE DETAILS

www.socomec.com/worldwide

HEAD OFFICE

SOCOMECS GROUP

SAS SOCOMECS capital 10 816 800€
R.C.S. Strasbourg B 548 500 149
B.P. 60010 - 1, rue de Westhouse
F-67235 Benfeld Cedex - FRANCE
Tel. +33 3 88 57 41 41
Fax +33 3 88 74 08 00
info.scp.isd@socomec.com

www.socomec.com

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