DATA CENTER

Meeting the challenge of power and energy performance





Your challenges, our solutions



Availability

Guarantee the continuity and safety of your data center's power supply

A guaranteed, continuous supply of high quality power provides the ultimate protection for your critical assets. Power where you need it, when you need it.



Efficiency

Minimize energy costs and operating expenditure to maximize your investment

A combined focus on performance and efficiency will guarantee maximum uptime and reduce operating expenditure - throughout the equipment lifecycle.



Flexibility

Future proof your critical power facility

Critical buildings and facilities are challenged with constantly evolving demands on energy performance. Reliable, cost-effective power can be scaled to meet rapidly changing capacity demands.



Capacity

Advanced monitoring provides improved energy efficiency and cost savings

The effective management of energy costs starts with the accurate measurement and centralised monitoring of energy consumption. An advanced understanding of a site's buildings and processes will reduce energy consumption, costs and emissions.



Sustainability

Minimize your environmental impact

Increasingly legislation demands that buildings and infrastructure are more sustainable throughout their life cycle. Limit your building's environmental impact.





SOCOMEC solutions meet the specific requirements of data centers



The products and solutions offered in this brochure are suitable for all types of data centers,, including new-build and refurbishment projects, with power supply requirements of 100 kVA to 3000 kVA (i.e. premises covering approximately 100 m² up to 3000 m²).



	TYPE OF DATA CENTER		
		COLOCATION	INTERNET
RELIABILITY LEVEL	High	Average	Average
IT EQUIPMENT	Heterogeneous	Heterogeneous	Homogeneous
ELECTRICAL POWER DENSITY	Average	Average	High
ELECTRICAL DISTRIBUTION ARCHITECTURE	Customized	Standardized	Standardized
TIER CLASSIFICATION*	3 - 4	2 - 3	1 - 2
PHYSICAL & APPLICATION CONSOLIDATION	Physical & Application	Multiplication	Multiplication
ELECTRICAL POWER REQUIREMENT	Available	Transparent	Economical

^{*} Infrastructure performance level



Solutions for:

 Supplying power to ensure monitoring of the data center's electrical, physical and IT infrastructure to optimize the use, availability and efficiency of resources.



NETYS RT

MASTERYS GP

Our adapted responses to your applications

The supply of reliable, cost-effective power which can be scaled to meet the rapidly changing demands of a data center is the foundation upon which our clients' businesses are built.

SOCOMEC invests heavily in pioneering research and product design in order to deliver world-class innovations to solve your greatest challenges in terms of energy availability, efficiency, capacity, flexibility and sustainability.

We have developed a range of fully integrated systems, drawing on the wealth of knowledge and skills from each highly specialised division of SOCOMEC.

Furthermore, our solutions can be individually engineered to optimize energy performance within your system architecture.

Physical infrastructure

Solutions for:

- Supplying power to safety systems (fire, access control, etc.) and critical non-IT functional equipment (air conditioning systems, etc.)
- Ensuring the safety of persons and assets





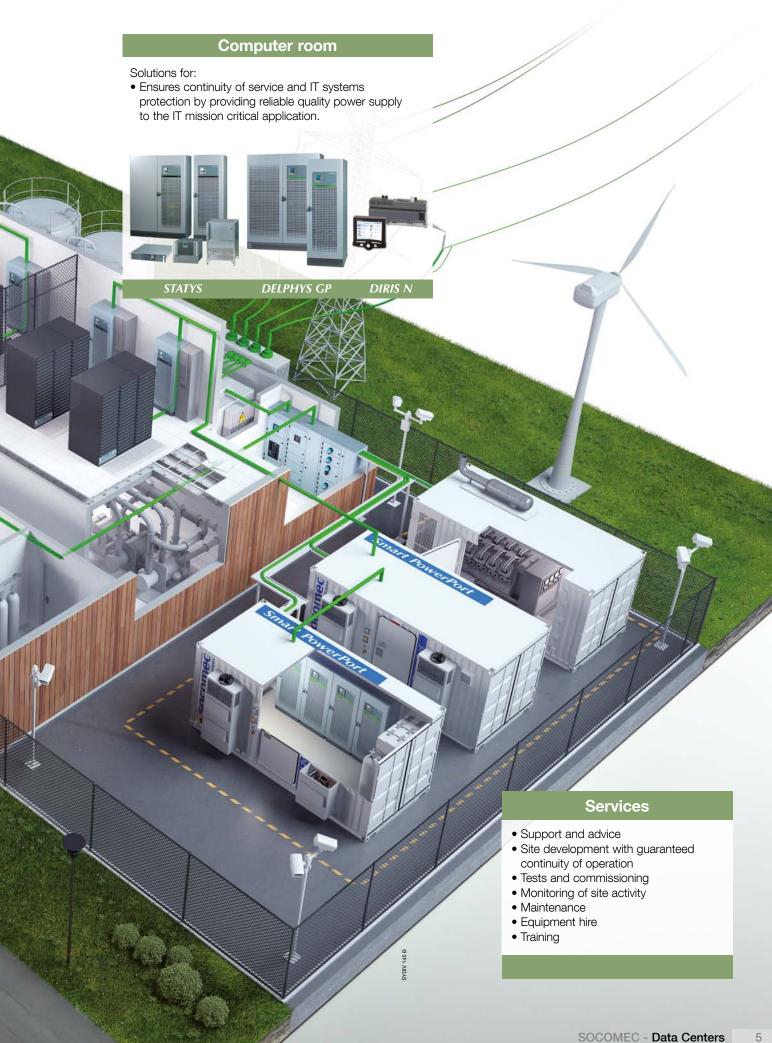




SHARYS MODULYS GP

ATYS

DIRIS A



The SOCOMEC difference

Competencies and offerings guaranteeing energy availability and quality to ensure optimal and cost-effective operation of your data center.



Solutions to maximize energy efficiency and quality

SOLUTIONS	FUNCTIONS	BENEFITS
Branch Circuit Monitoring System DIRIS BCMS 720	Current, power, and energy monitoring for up to 72 single-phase branch circuits and 1 or 2 PDU incomers User configurable alarms (overvoltage, undervoltage or zero current) RS485 Modbus and/or Ethernet SNMP communication	Compact, fits in all PDUs, any combination of 6 or 9 CT strips (18 mm pitch) Easy and fast installation, all components can be either DIN rail or back plate mounted Robust and safe, all components are protected by tough casing Open architecture, compatible with any EMS or BMS Easy adaptation to existing PDUs with split-core CTs
Power Monitoring Devices DIRIS A	Multi-measurement of all electrical parameters Power quality monitoring & event logging Power management & alarms Earth leakage monitoring (DIRIS A80) Wide variety of communication options Embedded web server in Ethernet module	 Easy and fast installation Customisable thanks to option modules Communications with any energy management system (EMS, BMS, etc.) Remote operation and configuration via web server Performance and reliability guarantee due to IEC 61557-12 compliance (PMD) Adapted to existing installations (<i>RETROFIT</i> line)
Network analysers DIRIS N	Measurement of electrical values Energy management and multi-utility capability via pulse inputs Monitoring of all mains parameters Device control/command Analysis of mains network quality (waveform, EN50160 report, etc.)	Effective detection, identification and location of events affecting the quality of the power supply (sags, swells, transients, etc.) Provides EN50160 standardised reports Rapid commissioning Large colour screen for ease of use Data and graphs can be downloaded to a USB key without a PC
Energy meters and pulse concentrators COUNTIS E	Manage multiple fluids (gas, water, compressed air) using ECi pulse concentrator Metering of energy and active, reactive, total and partial power and other electrical parameters (I, V, PF, etc.) Multi-tariff management Load curve management Modbus/M-BUS communication or pulse output	Easy to install: protection against phase/neutral inversion and wiring error detection, intuitive configuration tool, measurement without CT up to 100 A Easy to use: LCD backlight, user-friendly menus, metrological LED Dedicated models for sub-billing applications (MID-certified tamper-proof) Communicates with any energy monitoring system (EMS, BMS, etc.) Adapted to existing installations (RETROFIT line)



Solutions to maximize energy availability

SOLUTIONS	FUNCTIONS	BENEFITS
Motorised and automatic changeover switches From 125 to 3200 A ATyS Also available: enclosed Automatic Transfer solutions ATS Bypass	On-load switching between two power supply sources Three operating modes Auto, Manual, Padlocked Mechanical position interlocking Integrated auto-configuration Continuous information on product availability	Continuity of the power supply Safety of operators Secure operations Load protection Rapid commissioning Easy maintenance
UPS from 10 up to 4 MVA/MW GreenPower 2.0 (Uninterruptible Power Supply) Also available: UPS solutions up to 5.4 MVA DELPHYS MX	UPS for data center protection Total protection of critical equipment in on-line double conversion operating mode (VFI mode defined by IEC standard 62040) Architectures adaptable to any requirement Modular UPS architecture Pluggable communication cards and embedded Ethernet connection IINK-UPS remote maintenance service	 High availability High efficiency 96% tested and verified by an independent body, allowing optimal energy saving Compact unit saving floor space Best power supply and level of protection for critical equipment against interruptions Maximum output avoiding UPS oversizing power kW = kVA Optimisation of the battery service life Numerous options for interfacing the solution with any external system
STS from 32 to 4000 A STATYS (Static Transfer System)	Provides redundant power supply to mission critical loads Increases the power supply availability by choosing the best power supply quality Automatic or manual transfers, seamless for the load Synchronised and non-synchronised sources management Load fault management Pluggable communication cards and embedded Ethernet connection	Maximize the overall availability of the data center Protection against main power supply outage and failures in the upstream power distribution system Facilitates installation and maintenance procedures Prevents fault propagation Protection for all types of applications, power supply systems, electrical environment conditions Allows easy integration in the customer's Building Management System (BMS)



The complete service that takes care of site developments

with guaranteed continuity of operation

This service includes the management and execution of work on the electrical infrastructure while minimising the impact on the operation of the data center.

Smart PowerPort: example of a rapidly deployable global solution to power your mission critical applications

- Coordination of work.
- Temporary or extension supply.
- Removal of existing equipment and recycling of the components concerned.
- Installation of new or extension equipment.
- · Commissioning.



To find out more

Discover the full range on our website:

www.socomec.com/ en/data-center



Customized services and support to guarantee successful projects

As the availability of electrical energy is of strategic importance to your business, the quality of our service is as important as the quality of our products.



Our network of experts support you at every stage in your project to ensure your energy goals are achieved:

SUPPORT AND ADVICE	 Support during system definition and project monitoring. Audit the quality of your power. Installation resilience audit. Thermal imaging. Audit your energy efficiency. Assistance in defining a recovery plan.
SITE DEVELOPMENT WITH GUARANTEED CONTINUITY OF OPERATION	 Coordination of work. Temporary supply or extension of existing supply. Removal of existing equipment and recycling of the components concerned. Installation of new or additional equipment. Commissioning.
TESTS AND COMMISSIONING	Factory and site acceptance.Commissioning certificate.Specific operator training.
MONITORING OF SITE ACTIVITY	 Phone assistance. Monitoring through periodic visits. Dedicated web space (key account customers).
MAINTENANCE	 PRISM Availability services: a manufacturer's global services to secure your critical power & investment. LINK-UPS: Remote monitoring and diagnostics. Replacement of consumable parts.
EQUIPMENT HIRE	Hire of UPS or complete containerised solution.
TRAINING	Training adapted to site & customer requirements, provided by Socomec staff.



More than 370 SOCOMEC experts supported by 175 engineers and technicians from our distributors, drive the solutions to your specific needs

Our global presence includes:

- 10 branches in France,
- 12 European subsidiaries,
- 8 Asian subsidiaries,
- representatives in 70+ countries.



Customer testimonial:

Datadock chose SOCOMEC



Datadock data center: 8 x 200 kVA GreenPower 2.0 DELPHYS GP UPS and BHC battery monitoring system.

Why choose SOCOMEC?

As a European manufacturer, SOCOMEC offers a range specifically adapted to data centers. Its products, solutions and services are targeted at fields of expertise recognised by its customers.



SOCOMEC solutions are already used in some of the world's most renowned data centers.



An industrial group

- Created in 1922.
- More than 3000 employees on five continents.
- Our core business: the availability, control and safety of low voltage electrical networks with a strong focus on our customers' power performance.



The vision of a specialist

- Management of technology modules.
- Adaptation of the range to customers' requirements: tailored products and system, expert solutions.



A culture of independence

- Family shareholders.
- Control of the decision-making process.
- Respect for human values.



A focus on service

- Advice, interventions, training.
- Teams located across the globe.
- Recognised skills and customer focus.



A flexible industrial structure

- Two European centers of excellence (France and Italy).
- Nine competitive production sites (France, Italy, Tunisia, India, China).
- Lean management organisation.
- Lead times, quality and cost guaranteed.



The spirit of innovation

- Almost 10% of turnover is ring-fenced for R&D
- A strong objective: to always be at the cutting-edge of technology.



Broad expertise: Performance Plus

The Panduit, Stulz and Socomec partnership enables data center professionals to optimize the performance and efficiency of three crucial aspects of the data center: physical infrastructure, air conditioning system and power supply. For more information, visit www.performanceplus.uk.com.













Responsible growth



Our family group is founded on independence, culture and sound values.
Our inherent assets and flair for innovation enable us to add value.
We adopt a medium- to long-term vision of our company to guarantee sustainable growth with the focus on personal, societal and environmental respect.





Global Compact

In 2003, the SOCOMEC group signed up to the United Nations "Global compact" initiative that aims to tackle the social and environmental challenges of globalisation.



The Green Grid™

The Green Grid TM is an association that brings together companies operating in the IT sector in order to promote energy performance for data centers.



European Code of Conduct (CoC)

By signing the CoC, SOCOMEC agrees to actively contribute to reducing the energy consumption of data centers by offering solutions dedicated to very high performance.



European Data Centre Association (EUDCA)

The EUDCA works at a European level to represent the data center industry across Europe.

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