

## **SOCOMECS UPS presents GREEN POWER: the unique 3-level power protection**

*SOCOMECS UPS, leader in power solutions for critical applications, has completed the 10 to 400 kVA GREEN POWER range, the first and only one with innovative 3-level technology inside. This technology not only ensures total business protection, it also means the maximum level of energy efficiency on the market (independently certified). The missing link in the range is now available, in the form of the Masterys 60-80 kVA.*

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New technology is about to change the way we understand UPS systems in relation to their efficiency and availability.

SOCOMECS UPS, leader in power solutions for critical applications, applied this innovative idea to develop a complete range that offers unique characteristics. This is the 3-level topology that, when applied to uninterruptible power systems with double conversion online technology, makes it possible to achieve maximum energy efficiency, equivalent to 96% (certified by Bureau Veritas and TÜV SÜD), while guaranteeing total load protection at all times and in all conditions.

This is the background to the GREEN POWER UPS family, currently the only one to cover a power range from 10 to 400 kVA thanks to the addition of the 60-80 kVA Masterys, which joins Masterys units in specifications from 10 to 40 kVA, 100 kVA and 120 kVA, the 160 to 400 kVA Delphys, and the modular 20-240 kVA Modulys UPS.

Why 3-level topology rather than the 2-level topology of regular UPS systems, and why the double conversion online operating mode? 3-level conversion topology means that IGBT switching occurs at half voltage, with a consequent significant reduction of losses on the inverter and rectifier. This is the secret behind the global efficiency level of 96%, which is higher than the maximum efficiency available using 2-level technology (approximately 93%).

It's not hard to calculate that when compared with a standard 93% efficiency system, a UPS offering 96% efficiency allows 45% less energy dispersal, so the UPS reduces electricity consumption almost by half. This significant energy saving allows users to recoup the initial purchase cost of the UPS in just a few years.

The double conversion online operating mode is the only one suitable for mission critical applications because it prevents any form of disturbance from reaching the load, irrespective of the conditions, thereby avoiding negative consequences in terms of power quality. Alternative operating modes, the configuration of which requires use of a bypass (albeit temporarily), are unable to guarantee the same level of protection, thus leaving the load exposed to serious risks of downtime.

This combination (3-level topology and online mode) thus makes it possible to meet the requirement to limit global costs (purchase + operating costs) of organisations that choose a UPS solution, without having to compromise in terms of availability. Because of its specific features, the Green Power UPS family is ideal for the protection of power continuity of complex and critical architecture, in which interruption of activities could result in severe damage in terms of business and other critical functions. Data centres first and

foremost, and also healthcare, telecoms, industrial networks, IT networks, and core rooms are the main sectors of application of GREEN POWER UPS systems.

*“With Masterys Green Power 60-80 kVA, we are proud of our unique position in offering a comprehensive range with certified high efficiency levels. 3-level topology has only recently started to get a foothold on the UPS market due to growing sensitivity of environmental issues among end users and the need to maximise power savings. Our R&D division immediately saw the enormous potential of this technology and the team's expertise was rapidly employed in the design stage. With a single product we are able to deliver on market demands, namely tangible savings in electricity costs and total system reliability”, states Renato Fratta, Managing Director SOCOMEC UPS Division.*

The following is an overview of the innovative characteristics that make the GREEN POWER UPS family unique:

- 3-level IGBT technology incorporated in both the inverter and the rectifier;
- certified 96% efficiency, not just at full load, but at very low load values;
- double conversion online operating mode, the only form of operation capable of guaranteeing total electrical protection from voltage surges, transients and other power line disturbances;
- output power factor of 0.9 to ensure full compatibility with the latest generation of servers;
- BHC, the interactive monitoring device to ensure complete protection and extended lifespan of batteries;
- T.SERVICE, the remote UPS monitoring service operational 24/7/365 for continuous diagnostics of the health of the UPS and real-time notification of faults to the service centre.

## Company Profile

**SOCOME Group** is an independent manufacturer specialising in the distribution, control and quality of power supplies serving low-voltage electrical networks, industry and the service sector.

Created in 1922, the industrial group has developed two business areas: Trip and Low Voltage Protection Systems (circuit breakers, circuit breakers with fuses, switches, safety circuit breakers, electronic control and protection devices, boxes, cabinets etc.) and UPS Systems (uninterruptible systems, load transfer modules, rectifiers-battery chargers, harmonic compensators).

With 23 subsidiaries throughout the world, 9 industrial sites (France, Italy, Tunisia, India, China) and turnover of 383 million euro, SOCOMEC combines technological innovation and technical know-how with high-quality pre- and post- sales services.

Group member SOCOMEC UPS is a leading company in the business continuity sector. SOCOMEC UPS provides benchmark services for the following applications: ICT, Data Centres, Healthcare, Transport, Industry, Retail, Public Administration and Finance, offering efficient, reliable and scalable solutions.

SOCOME-branded UPS systems offer high performance levels and save a considerable amount of energy. The company observes the European Commission's Code of Conduct by adopting its best practices while participating in the UN Global Compact initiative; it has also signed up to the Green Grid association.

For further information: [www.socomec.com](http://www.socomec.com)