MASTERYS GP

High-efficiency protection without compromise

Green Power 2.0 range from 10 to 40 kVA/kW

Three-phase UPS

The solution for

- Data centres
- Telecommunications
- Healthcare sector
- Service sector
- Infrastructure
- Industrial applications

Certifications

The ***MASTERYS GP*** series is certified by TÜV SÜD with regard to product safety (EN 62040-1).

Advantages

3 LEVEL TECHNOLOGY

96% EFFICIENCY

PF 1

kW = kVA

Our dedicated Expert Services for UPS

We offer services to ensure your UPS highest availability:

- Commissioning
- On-site intervention
- Preventive maintenance visits
- 24-hour call out and rapid on-site repairs
- Maintenance packages
- Training

www.socomec.com/services

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 conditions, to have the value in the real site conditions.
- Ultra high efficiency in VFI mode is provided by an innovative topology (3-Level technology) that has been developed for all the Green Power 2.0 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.
- 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.
- Battery configuration can be optimized, thanks to a very wide DC range.
- 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.

socomec Innovative Power Solutions

Standard electrical features

- Dual input mains.
- Internal maintenance bypass.
- Backfeed protection: detection circuit.
- EBS (Expert Battery System) for battery management.
- Battery temperature sensor.

Electrical options

- External maintenance bypass.
- External battery cabinet.
- Additional battery chargers.
- Galvanic isolation transformer.
- Parallel kit.
- ACS synchronization system.

Standard communication features

- User-friendly multilingual interface with color graphic display.
- Commissioning wizard.
- 2 slots for communication options.
- MODBUS TCP.
- MODBUS RTU.
- Embedded LAN interface (web pages, email).

Communication options

- Dry-contact interface.
- PROFIBUS.
- BACnet/IP interface.
- NET VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems.

Remote monitoring service

- LINK-UPS, remote monitoring service that connects your UPS to your Critical Power specialist 24/7.

Technical data

		MASTERYS GP				
Sn [kVA]		10	15	20	30	40
Pn [kW]		10	15	20	30	40
Input/output 3/1		•	•	•	-	-
Input/output 3/3		•	•	•	•	•
Parallel configuration		up to 6 units				
INPUT						
Rated voltage		400 V 3ph+N				
Voltage tolerance		240 V to 480 V(1)				
Rated frequency		50/60 Hz ± 10%				
Power factor / THDI		> 0.99 / < 2.5%				
OUTPUT						
Power factor		1 (according to IEC/EN 62040-3)				
Rated voltage		1ph + N: 230 V (can be configured 220/240 V) 3ph + N: 400 V (can be configured 380/415 V)				
Voltage tolerance		static load ±1 % dynamic load in accordance with VFI-SS-111				
Rated frequency		50/60 Hz				
Frequency tolerance		± 2% (configurable for GenSet compatibility)				
Total output voltage distortion - linear load		< 1%				
Total output voltage distortion - non-linear load		< 3%				
Overload		125% for 10 minutes, 150% for 1 minute(1)				
Crest factor		3:1				
BYPASS						
Rated voltage		rated output voltage				
Voltage tolerance		± 15% (configurable from 10% to 20%)				
Rated frequency		50/60 Hz				
Frequency tolerance		± 2%				
EFFICIENCY (TÜV SÜD verified)						
Online mode @ 50 % of load		up to 96%				
Online mode @ 75 % of load		up to 96%				
Online mode @ 100 % of load		up to 96%				
Eco Mode		up to 98%				
ENVIRONMENT						
Operating ambient temperature		from 0 °C up to +40(1) °C (from 15 °C to 25 °C for maximum battery life)				
Relative humidity		0% - 95% without condensation				
Maximum altitude		1000 m without derating (max. 3000 m)				
Acoustic level at 1 m (ISO 3746)		< 52 dBA			< 55 dBA	
UPS CABINET						
Dimensions	W	444 mm				
	D	795 mm				
	H	800 mm		1000 mm		1400 mm
Weight		190 kg	195 kg		315 kg	320 kg
Degree of protection		IP20				
Colours		RAL 7012				
STANDARDS						
Safety		IEC/EN 62040-1, AS 62040.1.1, AS 62040.1.2				
EMC		IEC/EN 62040-2, AS 62040.2				
Performance		IEC/EN 62040-3, AS 62040.3				
Seismic compliance		On demand according to Uniform Building Code UBC-1997 Zone 4				
Product declaration		CE, RCM (E2376)				

(1) Conditions apply.