



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



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.

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).

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.

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.