



Green Power 2.0

MASTERYS GP from 10 to 120 kVA/kW
high availability, ultra high energy efficiency
and maximum power available

Three-phase UPS



GAMME 202 C

GAMME 125 B

The solution for

- > Data centres
- > Telecommunications
- > Service sector
- > IT-Networks / Infrastructures

Certifications



The **Green Power 2.0** series is certified by TUV SUD with regard to product safety (EN 62040-1).

Advantages



Better performance than the EU Code of Conduct on efficiency of AC-UPS

Energy saving + Full rated power = 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 UPS ranges.

Full-rated power: kW=kVA

- No power downgrading when supplying the latest generation of servers in typical data centre conditions.
- Full power UPS design up to 35 °C, with 25% more power compared to UPS with PF=0.8 and 11% more power compared to UPS with PF=0.9.
- Suitable also for leading power factor loads down to 0.9 without derating.

Significant cost-saving (TCO)

- Maximum energy saving thanks to 96% output efficiency: 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 size of UPS, and therefore less €/kW.
- With its “clean rectifier“, **Green Power 2.0** UPS significantly optimize the upstream infrastructure without over rating the supply system (i.e. generator sets, switches, cables, protection devices).
- High efficiency minimizes the amount of battery for an equivalent back-up time.
- Battery configuration can be optimized, thanks to a very wide DC range.
- Extended battery life and performance:
 - long life battery,
 - very wide input voltage (-40% / +20%) and frequency (45 to 65 Hz) without battery use,
 - EBS (Expert Battery System) charging management improves battery service life.

Advanced interface

- Up to 30 languages embedded.
- Colour graphic display.
- Commissioning wizard.

Standard electrical features

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

Electrical options

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

Standard communication features

- MODBUS TCP.
- MODBUS/JBUS RTU.
- Embedded LAN interface (web pages, email).
- 2 slots for communication options.

Communication options

- Remote mimic panel.
- Dry-contact interface.
- PROFIBUS.
- **NET VISION**: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems.

Technical data

MASTERYS GP									
Sn [kVA]	10	15	20	30	40	60	80	100	120
Pn [kW] (0 °C ÷ 35 °C)	10	15	20	30	40	60	80	100	120
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									
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 from 1% to 8%)								
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 with 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 +35 °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 dB	< 55 dB	< 60 dBA	< 65 dBA					
UPS CABINET									
Dimensions W x D x H (mm)	444 x 795 x 800	444 x 795 x 1000	444 x 795 x 1400	600 x 800 x 1400	700 x 800 x 1930				
Weight	190 kg	195 kg	315 kg	320 kg	180 kg	200 kg	380 kg	460 kg	
Degree of protection	IP20								
Colours	RAL 7012								
STANDARDS									
Safety	EN 62040-1 (TÜV SÜD certified), EN 60950-1								
EMC	EN 62040-2								
Performance	EN 62040-3 (VFI-SS-111)								
Product declaration	CE								

(1) conditions apply

Remote maintenance

- **T.SERVICE**: maintenance software for continuous 24/7 monitoring of the SOCOMEC UPS.