



# Green Power 2.0

## MASTERYS GP from 10 to 120 kVA/kW

ultra high energy efficiency and maximum power availability

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 = 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 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/JBUS RTU.
- Embedded LAN interface (web pages, email).

### Technical data

MASTERYS GP										
Sn [kVA]	10	15	20	30	40	60	80	100	120	
Pn [kW]	10	15	20	30	40	60	80	100	120	
Input/output 3/1	•	•	•	-	-	-	-	-	-	
Input/output 3/3	•	•	•	•	•	•	•	•	•	
Parallel configuration	up to 6 units									
<b>INPUT</b>										
Rated voltage	400 V 3ph+N									
Voltage tolerance	240 V to 480 V <sup>(1)</sup>									
Rated frequency	50/60 Hz ± 10%									
Power factor / THDI	> 0.99 / < 2.5%									
<b>OUTPUT</b>										
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 <sup>(1)</sup>									
Crest factor	3:1									
<b>BYPASS</b>										
Rated voltage	rated output voltage									
Voltage tolerance	± 15% (configurable with from 10% to 20%)									
Rated frequency	50/60 Hz									
Frequency tolerance	± 2%									
<b>EFFICIENCY (TÜV SÜD verified)</b>										
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%									
<b>ENVIRONMENT</b>										
Operating ambient temperature	from 0 °C up to +40 <sup>(1)</sup> °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	< 60 dBA	< 65 dBA						
<b>UPS CABINET</b>										
Dimensions	W	444 mm			600 mm		700 mm			
	D	795 mm						800 mm		
	H	800 mm	1000 mm	1400 mm		1930 mm				
Weight	190 kg	195 kg	315 kg	320 kg	180 kg	200 kg	380 kg	460 kg		
Degree of protection	IP20									
Colours	RAL 7012									
<b>STANDARDS</b>										
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.

### Communication options

- Remote mimic panel.
- 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

- Remote mobile and web-based surveillance service connected 24/7 to your local Socomec Service Centre.