

MASTERYS GP

High-efficiency protection without compromise

Green Power 2.0 range from 10 to 120 kVA/kW



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.

The solution for

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

Certifications



Advantages





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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	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								
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						0.007 (2.0	<i>370</i>			
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 Total output voltage distortion -		< 1%								
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		erified)								
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	< 60) dBA	< 65	dBA
UPS CABINET										
Dimensions	W	444 mm					600	mm	700 mm	
	D		795 mm						mm	
	Н		mm) mm		1400 mm) mm
Weight		190 kg	19	5 kg	315 kg	320 kg	180 kg	200 kg	380 kg	460 k
Degree of protection		IP20								
Colours						RAL 7012				
STANDARDS										
Safety			IEC/EN 620	140-1 (TÜV			50-1, AS 62	040.1.1, AS	62040.1.2	
EMC	IEC/EN 62040-2, AS 62040.2									
Performance		VFI-SS-111 - IEC/EN 62040-3, AS 62040.3								
Product declaration					CE	, RCM (E23	376)			

(1) Conditions apply.