

## **MASTERYS GP4**

# 4<sup>th</sup> generation digital native high performance UPS from 60 to 160 kVA/kW





## Performance beyond all expectations

- Performance certified by an independent body.
- Designed to manage Lithium backup storage.
- Modern aesthetics combined with ergonomics.
- Large 7" touch screen display facilitates system control and usage.

### Energy Saving: high efficiency without compromise

- Offers the highest efficiency on the market using a VFI – Double Conversion Mode, the only UPS working mode to ensure a total load protection from any mains quality issues.
- Fast Return On Investment: UPS "self-paying" with energy saving.
- No overdesign cost thanks to its reduced €/kW ratio.

#### Full-rated power: kW=kVA

- No power downgrade when supplying the latest generation of servers (leading or unity power factor).
- True full active power, according to IEC 62040
- Full performance up to 40 °C without derating.

### Extremely reliable, robust and durable

- Completely designed and manufactured in Europe.
- Best in class and officially attested:
  - $MTBF_{VFI}$  = 300,000 hours,
  - $MTBF_{UPS} = 10,000,000 \text{ hours.}$
- Certified seismic resistance.
- Life extension service program doubles life expectancy.

#### Tailor-made - as standard

- Easy configurable for retrofit in existing installations.
- Catalogue base flexibility to meet specific needs.
- Fast delivery time for a fully personalized solution.

#### Native digital solution

- Ready for integration in LAN and Industry 4.0 ecosystem.
- IoT ready and remote cloud services.
- Multiprocessor intelligent product architecture.
- Product identification and configuration using standard QR codes.

#### The solution for

#### **Mission Critical**

- > Small and medium data centres
- > IT infrastructure
- > E-Medical
- > Medical devices
- > Control rooms

#### **Smart manufacturing**

- > Edge computing
- > IoT systems
- > Cloud service access

#### **Certifications**





Seismic resistent
The MASTERYS GP4 units have successfully passed severe tests to verify their resistance to withstand Zone 4 seismic events

#### Advantages











### A tutoring app for a simplified installation

Augmented Reality technology



- Suided workflow on your smartphone
- Verification and validation by the Socomec Service Center









#### System features

- Dual input mains.
- Internal maintenance bypass switch.
- Input mains switch breaker.
- Output switch breaker.
- Auxiliary mains switch breaker.
- Backfeed protection: detection circuit.
- Power walk-in ramp for excellent compliance with generators.
- · Common or shared battery for N+1 configuration.

#### Standard communication features

- 7" touch screen multilingual colour graphic display.
- 2 slots for communication options.
- USB port to download log file.
- Ethernet port for service purposes.

#### System options

- External battery cabinet with normal or long-life VRLA batteries.
- · High capacity battery charger.
- Alternative backup power technologies:
  - NiCd batteries
  - Li-Ion batteries
  - Li-lon capacitors
- 3-phase input without neutral.
- Internal backfeed isolation device.
- · Common mains coupling bars.
- TN-C grounding system.
- ACS synchronisation system.
- IP21 degree of protection.
- · Top cabling kit.
- Top ventilation kit.
- Bypass redundant cooling.
- · Seismic fixing kit.

#### Communication options

- Dry-contact, RS232/485 interfaces.
- MODBUS RTU.
- MODBUS TCP.
- BACnet/IP interface.
- NET VISION: professional WEB/SNMP, ethernet interface for UPS monitoring and remote automatic shutdown.
- · Ethernet gateway for clould sevices.

#### Remote monitoring service

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

#### **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



#### Technical data

|                                  |        |                                                                                   |        | MASTERYS GP4 |        |        |
|----------------------------------|--------|-----------------------------------------------------------------------------------|--------|--------------|--------|--------|
| Sn [kVA]                         |        | 60                                                                                | 80     | 100          | 120    | 160    |
| Pn [kW]                          |        | 60                                                                                | 80     | 100          | 120    | 160    |
| Input/output 3/3                 |        | 3/3                                                                               |        |              |        |        |
| Parallel configuration           |        | up to 6 units                                                                     |        |              |        |        |
| INPUT                            |        |                                                                                   |        |              |        |        |
| Rated voltage                    |        | 400 V 3ph+N (3 wire input also available on demand)                               |        |              |        |        |
| Voltage tolerance                |        | 240 V to 480 V                                                                    |        |              |        |        |
| Rated frequency                  |        | 50/60 Hz ± 10%                                                                    |        |              |        |        |
| OUTPUT                           |        |                                                                                   |        |              |        |        |
| Power factor                     |        | 1 (according to IEC/EN 62040-3)                                                   |        |              |        |        |
| Rated voltage                    |        | 3ph + N: 400 V (can be configured 380/415 V)                                      |        |              |        |        |
| Rated frequency                  |        | 50/60 Hz                                                                          |        |              |        |        |
| Frequency tolerance              |        | ± 2% (configurable for GenSet compatibility)                                      |        |              |        |        |
| Total output voltage distortion  |        | <1%                                                                               |        |              |        |        |
| Overload                         |        | 125% for 10 minutes, 150% for 1 minute                                            |        |              |        |        |
| 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 ve | erified)                                                                          |        |              |        |        |
| Double conversion mode           |        | up to 96.5%                                                                       |        |              |        |        |
| Always on mode                   |        | up to 99%                                                                         |        |              |        |        |
| ENVIRONMENT                      |        |                                                                                   |        |              |        |        |
| Operating ambient temperature    |        | from 0 °C 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) |        | < 55 dBA < 60 dBA < 65 dBA                                                        |        |              |        |        |
| UPS CABINET                      |        | •                                                                                 |        |              |        | •      |
|                                  | W      |                                                                                   |        | 600 mm       |        |        |
| Dimensions                       | D      | 855 mm                                                                            |        |              |        |        |
|                                  | Н      | 1400 mm 1930 mm                                                                   |        |              |        |        |
| Weight                           |        | 174 kg                                                                            | 186 kg | 228 kg       | 240 kg | 350 kg |
| Degree of protection             |        | ·                                                                                 |        | IP20         |        | '      |
| Colours                          |        | RAL 7016                                                                          |        |              |        |        |
| STANDARDS                        |        | •                                                                                 |        |              |        |        |
| Safety EMC                       |        | IEC/EN 62040-1, AS 62040.1.1, AS 62040.1.2                                        |        |              |        |        |
| Performance                      |        | IEC/EN 62040-3, AS 62040.3                                                        |        |              |        |        |
| Environmental                    |        | full compliance with the RoHS EU directive                                        |        |              |        |        |
| Seismic compliance               |        | on demand, in accordance with the Uniform Building Code UBC-1997 Zone 4           |        |              |        |        |
| Product declaration              |        | CE, RCM (E2376)                                                                   |        |              |        |        |
|                                  |        |                                                                                   |        |              |        |        |

