

MASTERYS IP+

Robust, highly reliable protection for harsh environments
from 10 to 80 kVA

Superior



The solution for

> Energy

Strong points

- > Designed for the most demanding applications
- > Process continuity
- > Easy integration into industrial networks

Conformity to standards

- > IEC/EN 62040, IEC/EN 62040-1, IEC/EN 62040-3
- > AS 62040.1.1, AS 62040.1.2, AS 62040.2, AS 62040.3
- > CE
- > RCM (E2376)

Certifications and attestations



The MASTERYS IP+ series is certified by TUV SUD with regard to product safety (EN 62040-1).

Advantages



Expert services

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

Function

Specially engineered to power and protect typical industrial equipments such as motors, motor speed drivers, lamps, non linear loads, welding equipments, power supplies, MASTERYS IP+ is also perfectly able to supply control equipments like programmable controllers, sensors and measurement apparatus and integrates perfectly into the most demanding industrial environments.

Advantages

Designed for the most demanding applications

- Designed to protect industrial processes.
- A compact solution with isolation transformer and integrated batteries.
- Robust enclosure (2 mm thick heavy steel structure).
- Floor anchoring (to prevent tilting).
- Standard IP31 protection degree.
- Dust and water splash resistant enclosure (IP52) with easy replaceable dust filters (option).
- Operation at temperature up to 50 °C.
- Wide input voltage tolerance from -40 % up to +20 % of nominal voltage.
- Double EMC immunity compared to UPS international standard IEC 62040-2.
- Double overvoltage protection.

Process continuity

- Frontal access for input/output cabling, spares replacement and preventative maintenance.
- Scalable power and high availability (using redundancy), with the facility to parallel up to 6 units.

Easy integration into industrial networks

- Input power factor - 0.99 and input current harmonic distortion < 3% thanks to IGBT rectifier.
- Compatible with Open Vented Lead Acid, Valve Regulated Lead Acid (VRLA) and Nickel Cadmium batteries.
- User-friendly multilingual interface with graphic display.
- Flexible communication boards for every industrial communication need: dry contacts, MODBUS, PROFIBUS, etc.
- Fully compatible with generator sets.
- K-rated galvanic isolation transformer embedded.
- Adaptation to typical industrial voltages (input and output).

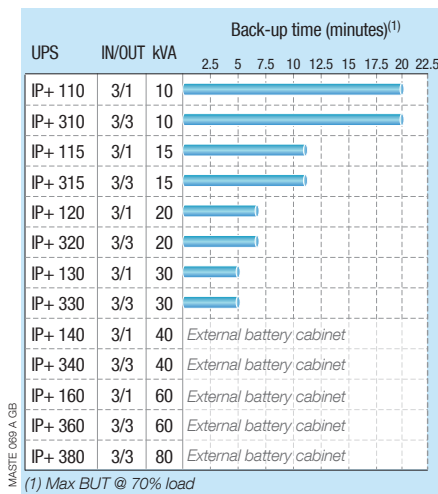
For industrial loads

- 100 % non-linear loads.
- 100 % unbalanced loads.
- 100 % "6-pulse" loads (motor speed drivers, welding equipment, power supplies...).
- Motors, lamps, capacitive loads.

General characteristics

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

UPS and batteries



Electrical options

- Long-life batteries.
- External battery cabinet (degree of protection up to IP32).
- External temperature sensor.
- Additional battery chargers.
- Additional transformer.
- Parallel kit.
- Cold start.
- ACS synchronization system.
- Neutral creation kit for mains without neutral.
- Tropicalization and anti-corrosion protection for electrical boards.

Technical data

MASTERYS IP+ 10-80							
Sn [kVA]	10	15	20	30	40	60	80
Pn [kW] - 3/1	9	13.5	18	27	32	48	-
Pn [kW] - 3/3	9	13.5	18	27	36	48	64
Parallel configuration ⁽¹⁾	up to 6 units						
INPUT							
Rated voltage	400 V						
Voltage tolerance	± 20% ⁽²⁾ (up to -40% @ 50% of rated power)						
Rated frequency	50/60 Hz						
Frequency tolerance	± 10%						
Power factor / THDI ⁽³⁾	0.99 / < 3%						
OUTPUT							
Rated voltage	1ph + N: 230 V (can be configured 220/240 V) 3ph + N: 400 V (380/415 V configurable)						
Voltage tolerance	± 1%						
Rated frequency	50/60 Hz						
Frequency tolerance	± 2% (configurable from 1% to 8% with generating set)						
Total output voltage distortion - linear load	< 1%						
Total output voltage distortion - non-linear load	< 5%						
Overload	125% for 10 minutes, 150% for 1 minute ⁽²⁾						
Crest factor	3:1 (complying with IEC 62040-3)						
BYPASS							
Rated voltage	1ph + N: 230 V, 3ph + N: 400 V						
Voltage tolerance	± 15% (configurable from 10% to 20% with generating set)						
Rated frequency	50/60 Hz						
Frequency tolerance	± 2% (configurable from 1% to 8% with generating set)						
ENVIRONMENT							
Operating ambient temperature	from 0 °C up to +50 °C ⁽²⁾ (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	< 65 dBA				
UPS CABINET							
Dimensions (3/1) W x D x H	600 x 800 x 1400 mm			1000 x 835 x 1400 mm		-	
Dimensions (3/3) W x D x H	600 x 800 x 1400 mm			1000 x 835 x 1400 mm		-	
Weight (3/1)	230 kg	250 kg	270 kg	330 kg	490 kg	540 kg	-
Weight (3/3)	230 kg	250 kg	270 kg	320 kg	370 kg	500 kg	550 kg
Degree of protection (according to IEC 60529)	IP31 and IP52				IP31		
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						
Product declaration	CE, RCM (E2376), UKCA						

(1) With transformer on input/bypass side. - (2) Conditions apply.
(3) At source THDV < 2% and nominal load.

Standard communication features

- Multilanguage graphic display.
- MODBUS RTU.
- Dry-contact interface (configurable voltagefree contacts).
- Ethernet interface for UPS monitoring via WEB pages.

Communication options

- 2 slots for communication options.
- MODBUS RTU RS485 or MODBUS TCP.
- PROFIBUS / PROFINET gateway.
- BACnet/IP interface.
- NET VISION: professional WEB/SNMP Ethernet interface for secure UPS monitoring and remote automatic shutdown.
- REMOTE VIEW PRO supervision software
- IoT gateway for Socomec cloud services and SOLIVE UPS mobile app.

Remote monitoring and cloud services

- SoLink: Socomec 24/7 remote monitoring service connecting your installation to the nearest Socomec Service Centre.
- SoLive UPS: mobile app enabling the monitoring of the UPS systems from a smartphone.