**MODULYS RM GP**

Rack-mounted modular UPS system

**Green Power 2.0** range up to 4 x 25 kW

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### Full rack integration
- Designed for easy and no-risk integration in 19” standard rack cabinets.
- Total compatibility with any 19” standard rack cabinet.
- High power density.
- Easy to manage, integrate and customise.
- Flexible simplified cabling.

### Overall cost optimisation
- Time saving integration process.
- No risk of cost and budget overruns.
- Compact solution saving valuable space.
- Simplified logistics.
- Easy integration: avoids costly set-up and reworking.

### Totally redundant design
- N+1 redundancy level.
- Designed for no single point of failure.
- No centralised parallel control.
- Totally independent power modules.

### Enhanced serviceability performance
- Fast & safe maintenance based on hot-swap parts (power modules, bypass, electronic boards, batteries).
- Ready for concurrent maintenance.
- Battery can be hot-swapped without shutting down the connected equipment.

### ‘Forever Young’ concept
- Exclusive life cycle extension programme.
- Eliminates end-of-life criticality.
- Based on an electronics-free sub-rack enclosure + a set of plug-in parts.
- Module compatibility guaranteed for 20+ years.
- Allows for the implementation of future module technology.

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### The solution for

- Integration in 19” standard rack cabinets
- Computer rooms
- Data centers
- Banks
- Healthcare facilities
- Insurance
- Telecom

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### Certifications and attestations

- **TÜV SÜD** with regard to product safety (EN 62040-1).
- **Serma Technologies** (IÉC 62380).
- **RoHS** compliant.

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### Advantages

- **Up to 4 x 25 kW**
- **PF = kW / kVA**
- **96% Efficiency**
- **Li-ion**
- **Made in Europe**

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### Technical data

- **UPS Rack Efficiency (TÜV SÜD verified)**
- **Hot-Swap Power Module**
- **Output Crest factor 3:1**
- **Overload 125 % for 10 minutes, 150 % for 1 minute**

### Certifications

- **CE**
- **Performance EN 62040-3 (VFI-SS-111)**
- **EMC EN 62040-2 Class C2**
- **Safety EN 62040-1, EN 60950-1**

### Dimensions

- **Weight (empty cabinet):**
  - 15 kg
  - 36 kg
  - 42 kg

- **Dimensions W x D x H:**
  - 442 mm x 890 mm x 4 U
  - 442 mm x 920 mm x 9 U
  - 442 mm x 920 mm x 15 U

### Protection

- Independent protection for each battery string

### Frequency

- **50 / 60 Hz ±10 %**

### Voltage

- **380 / 400 / 415 V ±1 %**
- **3ph+N**

### Power factor / THDI

- **> 0.99 / < 3 %**

### Frequency

- **3/3**

### Power (Pn)

- **25 to 50 kW**
- **25 to 75 kW**

### Configuration

- **N, N+1 redundant**

### Model

- **9U 15U**

### Maximum altitude

- **1000 m without derating (3000 m max)**

### Weight (empty rack)

- **7 kg**
- **7.5 kg**

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### Maintenance packages

- **24-hour call out and rapid on-site repairs**
- **Preventive maintenance visits**
- **On-site intervention**

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### Gamme 2018-2019

General Catalogue 2018-2019
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
- 19" 4U battery rack.
- External battery cabinet.
- High capacity battery charger.

Standard communication features
- User-friendly multilingual interface with color graphic display.
- 2 slots for communication options.

Communication options
- Dry-contact, RS232/485 interfaces.
- MODBUS RTU.
- MODBUS TCP.
- BACnet/IP interface.
- NET VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems.

Technical data

<table>
<thead>
<tr>
<th>MODULYS RM GP</th>
<th>9U</th>
<th>1SU</th>
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</thead>
<tbody>
<tr>
<td>Number of power modules</td>
<td>1 to 2 x 25 kW</td>
<td>1 to 4(1) x 25 kW</td>
</tr>
<tr>
<td>Configuration</td>
<td>N, N+1 redundant</td>
<td></td>
</tr>
<tr>
<td>Power (Sin)</td>
<td>25 to 50 kW</td>
<td>25 to 75 kW</td>
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<tr>
<td>Power (Psh)</td>
<td>25 to 50 kW</td>
<td>25 to 75 kW</td>
</tr>
<tr>
<td>Input/output</td>
<td>3/3</td>
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</tbody>
</table>

INPUT
- Voltage: 400 V 3ph+N (340 V to 480 V)
- Frequency: 50 / 60 Hz ±10%
- Power factor / THD: > 0.99 / < 3 %

OUTPUT
- Voltage: 380/400/415 V ±1 % 3ph+N
- Frequency: 50 / 60 Hz ±0.1 %
- Voltage distortion: < 1 % (linear load), < 4 % (non-linear load according to IEC 62040-3)
- Short-circuit current: up to 3 x In
- Overload: 125 % for 10 minutes, 150 % for 1 minute
- Crest factor: 3.1

HOT-SWAP BYPASS
- Voltage: Rated output voltage ±15 % (configurable from 10 % to 20 %)
- Frequency: 50 / 60 Hz ±2 % (configurable for GenSet compatibility)
- Weight: 7 kg | 7.5 kg

EFFICIENCY (TÜV SÜD VERIFIED)
- Online double conversion mode: up to 96.5 %

ENVIRONMENT
- Ambient temperature: 0 °C to 40 °C (15 to 25 °C for maximum battery life)
- Relative humidity: 0 to 95 % without condensation
- Maximum altitude: 1000 m without derating (3000 m max)

UPS RACK
- Dimensions W x D x H: 442 mm x 920 mm x 9 U | 442 mm x 920 mm x 15 U
- Weight (empty cabinet): 36 kg | 42 kg
- Degree of protection: IP20

HOT-SWAP POWER MODULE
- Height: 3U
- Weight: 34 kg
- Type: Hot plug-in/Hot-swappable
- MTBF: > 1000000 hours (calculated and verified)

HOT-SWAP BATTERY RACK
- Type: Acid leak-proof - Long Life batteries
- Protection: Independent protection for each battery string
- Dimensions W x D x H: 442 mm x 890 mm x 4 U
- Weight (empty rack): 15 kg

STANDARDS
- Safety: EN 62040-1, EN 60950-1
- EMC: EN 62040-2 Class C2
- Performance: EN 62040-3 (IEC 61111)
- Product certification: CE

(1) 4th module is for redundancy.

Total resilience
- Electronics-free (failure-free) sub-rack enclosure.
- Totally independent and self-sufficient modules.
- Real selective module disconnection with galvanic separation.
- No centralised control for parallel and load sharing management.
- Totally segregated, fully sized and centralised auxiliary mains bypass and distributed inverter bypass.
- Configurable N+1 redundancy (power & battery).
- No single point of failure.
- Redundant parallel bus connection (ring configuration).

Optimum reliability
- Power module designed for superior robustness verified by an independent body (MTBF > 1,000,000 hr).
- Highly robust bypass (MTBF > 10,000,000 hr)
- Acid leak-proof modular battery box.

Maximum availability
- Fast recovery of lost redundancy thanks to minimum MTTR (Mean Time To Repair).
- No risk of downtime during power upgrading and maintenance.
- No risk of failure propagation.

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

www.socomec.com/services
MODULYS RM GP
Three-phase UPS
Green Power 2.0 range up to 4 x 25 kW

The benefit of a system designed for 19” rack integration

Easy to integrate
- Specifically designed for integration in 19” standard rack cabinets.
- Adjustable rails and mounting accessories.
- High power density (>6 kW/U).
- Low weight for easy integration.
- Pre-cabled system for simplified connections.
- Flexible cabling management for top, bottom and mixed top/bottom entry cable.
- Integrated cables organiser for tidy connections.
- Low power dissipation (<40 W per supplied kW).

No-risk integration
- Assured compatibility with any 19” standard rack cabinet.
- Pre-engineered and lab-tested parts assuring total system reliability.
- Automatic self-configuration power modules.
- No risk of design oversize due to project data uncertainty thanks to power module scalability.

Easy to customise
- Complete set of pre-engineered and pre-tested parts to meet any customer need:
  - modular Power Modules,
  - special power modules with extra battery charger for extremely long BUT,
  - plug-in J-BUS communication board for BMS integration,
  - plug-in SNMP board for UPS monitoring and shutdown management,
  - plug-in programmable dry-contact board,
  - environmental sensors,
  - blank panels (covers for empty slots),
  - rack-mounted battery modules,
  - external battery cabinet,
  - isolation transformer,
  - bypass redundant cooling.

Easy to manage
- Full documentation package including schematics, integration instructions, technical sheets, etc.
- Factory-set configurations for easy model selection.
- Full set of pre-engineered options for easy product customisation.

Pre-cabled system for simplified connections

Example of integration (3x25 kW):
Only 15 U of rack space occupied; space-saving design leaving free space for other rack-mounted devices. One empty slot in the MODULYS RM GP sub-rack remains available for power upgrade or redundancy.

Rear view (before adding rear protective cover). Flexible cabling management for easy connections and tidier cabling.

Overall cost optimisation
- Compact sub-rack enclosure saving valuable cabinet rack space.
- 2 sub-rack enclosure models for optimum sizing.
- Best-in-class €/kW ratio thanks to high power density and PF=1.
- Cost-optimised solution for minimum initial investment.
- Plug & Play and self-configuration power modules for easy and time-saving system setup.
- Pre-engineered and lab-tested parts for easy and time-saving customisation.
- Repeatable and standardised architecture for time-saving design and know-how capitalisation.

Simplified logistics
- Fewer standardised parts for easy ordering.
- Parts always in stock for fast procurement.
- Fewer parts covering a wide range of configurations, power, back-up time and options.
- Once integrated in the 19” rack cabinet, MODULYS RM GP can be safely shipped with the power modules plugged in.
MODULYS RM GP
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Green Power 2.0 range up to 4 x 25 kW

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Compact 15U sub-rack enclosure
> Designed for complete integration in any 19” standard rack cabinet.

Pre-cabled rack with maintenance bypass
M4-R-075-B2B0 15U rack, 4 slots
M4-R-050-B2B0 9U rack, 2 slots

Plug-in boards
CP-OP-ADC+SL Programmable IN/OUT dry contact + serial link
CP-OP-MODTCP MODBUS TCP interface
NET-VISION6CARD NET VISION card, WEB/SNMP interface IPV4/IPV6

Other options
NET-VISION-EMD Environment temp. and humidity sensor + 4 dry contacts
MAS-OP-TEMP External temperature sensor

Blank panel
M4-RI-OP-SSC Cover for empty slot

Power module - 25 kW
M4-RI-25

4U battery rack
M4-BR-009L With 42 x 9Ah batteries, fuse and switch
M4-BR-009L-B Empty, for 42 x 9Ah batteries including interconnections, fuses and switch

Mounting accessories
M4-RI-OP-RAIL Adjustable rails for rack mounting support

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