MODULYS GP-UL

Unique, fully modular and redundant solution
from 25 to 100 + 25 kVA/kW

View our video to discover more

With its flexible modularity providing seamless and risk-free power scalability up to 100 + 25 kW, the MODULYS GP-UL range is the ideal solution for unscheduled site upgrades or incremental power evolutions. The installed power can be increased up to 100 + 25 kW by adding hot-swap plug-in power modules for incremental steps of 25 kW.

Designed with no single point of failure, the MODULYS GP-tUL offers all the advantages of the Green Power 2.0 technology.

Fully modular system

- Plug-in power module.
- Plug-in battery module.
- Plug-in auxiliary mains bypass module.
- Top or bottom connection.
- Top-air exhaust module.

'Forever Young' concept

- Exclusive life cycle extension program.
- Eliminates end-of-life criticality.
- Based on an electronics-free cabinet and a set of plug-in parts.
- Module compatibility guaranteed for 20+ years.
- Allows for the implementation of future module technology.
- Company declaration of 20+ year compatibility.

Totally redundant design

- N+1, N+x redundancy level.
- Designed for no single point of failure.
- No centralized parallel control.
- Totally independent power modules.
- Redundant parallel bus connection (ring configuration).

Enhanced serviceability performance

- Power module automatic firmware alignment.
- Fast & safe maintenance based on hot-swap parts (power modules, auxiliary mains bypass, electronic boards).
- Load fully protected in online double conversion mode (VFI) during power module replacement.
- 3-color LED bar for quick and easy detection of the power module status.
- Battery can be hot-swapped without shutting down the connected equipment.
- Ready for concurrent maintenance.

The solution for

- Computer rooms
- Dacenters
- Banks
- Healthcare facilities
- Insurance
- Telecom
- Transport

Advantages

- Ensures absolute business continuity
- Aligns capacity to business demand
- Optimizes costs over the full life cycle

Certifications and attestations

Green Power 2.0 MODULYS GP is certified by MET with regard to product safety (UL 1778 and CSA-C22.2 No. 107.3-05).

SERMA TECHNOLOGIES

Green Power 2.0 MODULYS GP power module MTBF is calculated and verified higher than 1,000,000 hours by SERMA TECHNOLOGIES (IEC 62380)

MODULYS GP has been tested by CESI in compliance with the standard test procedure for the seismic qualification of electrical cabinets. MODULYS GP has successfully passed severe tests to verify its resistance to withstand Zone 4 seismic events.

RoHS COMPLIANT

MADE IN EUROPE

Advantages

- 3-level technology
- 96% efficiency
- Power factor = 1
- Ready for use with Lithium Ion batteries
- 1,000,000 hours of MTBF

socomec Innovative Power Solutions

Standard electrical features

- Dual input mains.
- Backfeed protection: detection circuit.
- EBS (Expert Battery System) for battery management.
- Auto battery test.
- Battery temperature sensor.
- Energy saver mode.

Electrical options

- External battery cabinet.
- High capacity battery charger.
- Internal backfeed isolation device.

Standard communication features

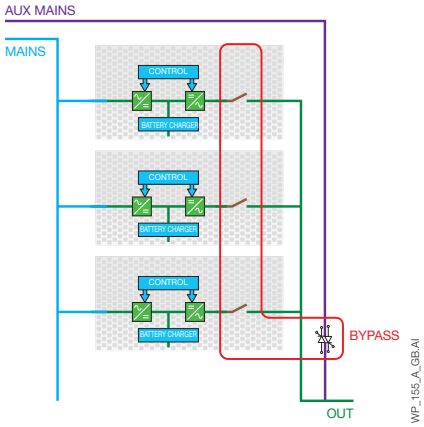
- User-friendly 7" touch-screen multilingual color graphic display.
- 2 slots for communication options.
- USB port to download UPS report and log file.
- Ethernet port for service purpose.
- Commissioning wizard.

Communication options

- Dry-contact interface (configurable voltage-free contacts).
- MODBUS RTU RS485 or MODBUS.
- BACnet/IP interface.
- NET VISION: professional WEB/SNMP Ethernet interface for secure UPS monitoring and remote automatic shutdown

Hybrid bypass architecture

- Distributed Inverter bypasses in parallel to segregated centralized Aux Mains bypass creating a redundant solution.



Technical data

	MODULYS GP-UL						
UPS MODEL	MODULYS GP-UL 40 KW		MODULYS GP-UL 25-100 KW				
Number of power modules	1	2	1	2	3	4	5(5)
Power (Sn)	25 kVA	40 kVA	25 kVA	50 kVA	75 kVA	100 kVA	100 kVA (N+1)
Power (Pn)	25 kW	40 KW	25 kW	50 kW	75 kW	100 kW	100 kW (N+1)
INPUT							
Voltage	480 V 3ph (±15%) up to -40 @ 50% of nominal load		3ph 480 V (±15%) up to -40% @ 50% of nominal load				
Frequency	60 Hz ± 10%						
Input power factor	> 0.99(1)						
Total harmonic input current distortion (THDi)	< 3% (@: Pn, Resistive load, Mains THDv < 1%)						
OUTPUT							
Voltage	400 V 3ph+N		480 V 3ph				
Frequency	60 Hz						
Total output voltage distortion (THDv)	< 1% (@ Pn, Resistive load)						
Overload(2)	125% for 10 minutes, 150% for 1 minute						
Crest Factor	> 2.7	> 3.3	> 2.7				> 3.3
STATIC BYPASS(3)							
Bypass input voltage	rated output voltage ± 15%						
Bypaass input frequency	60 Hz ± 2% selectable (±8% if Genset is used)						
STORED ENERGY MODE OF OPERATION							
Number of battery blocks (VRLA)	from 18+18 to 24+24						
ENVIRONMENT							
Operating temperature	32 to 104 °F(3)(4) / 0 to +40 °C(3)(4)						
Storage Temperature	23 to 122 °F / -5 to +50 °C						
Relative humidity	95 % without condensation						
Altitude (max)	3,300 ft (9,840 ft. with derating) / 1,000 m (3,000m with derating)						
Acoustic level at 1 m	< 56 dBA		< 58a dBA				
Required air capacity	470 CFM		1178 CFM				
Dissipated power (max)	3,500 W @ Pn / 11,950 BTU @ Pn		5,200 W @ Pn / 17,750 BTU @ Pn				
DIMENSIONS AND WEIGHT							
Dimensions (W x D x H)	2' 2" 5/8 x 2' 2" 17/64 x 6' 6" 5/64 676 x 895 x 1983 mm						
Empty cabinet	1,380 lbs / 626 kg		1,043 lbs / 473 kg				
UPS module	75 lbs / 34 kg						
Battery module	220.5 lbs / 100 kg		modular battery cabinet				
STANDARD							
Safety	UL1778, CSA-C22.2 No. 107.3-05, MET File E114654						
EMC	FCC part 15 Class A						
Performance	IEC 62040-3 (VFI-SS-111)						
Degree of protection standard	NEMA 1 (IP20)						
SEISMIC	OSHPD (available as option)						

(1) Pout > 50% Sn.
(2) Initial Condition Pout < 80% Pn.
(3) The UPS is not compatible with the use of an external bypass system.
(4) Suggested temperature range for best battery lifetime: 59 to 77 °F
(5) According to IEC 62040-3.
(6) 5th module is for redundancy.

Best practice award

Frost & Sullivan has has awarded SOCOMEC with its prize for Innovation & Excellence in Developing Scalable, Best-in-Class Products and Solutions.

SOCOMEC's vast expertise and technological know-how in modular UPS solutions have enabled it to develop a new modular, three-phase UPS that employs the latest cutting-edge technology combined in a unique design and architecture.

Our dedicated Expert Services for UPS

We offer services to ensure your UPS highest availability:

- > Commissioning
- > On-site intervention
- > Preventive maintenance visits
- > Maintenance packages
- > Training
- > Remote monitoring service

www.socomec.com/services

MODULYS GP-UL

Three-phase UPS

from 25 to 100 + 25 kVA/kW

The benefit of a fully modular system

Easy to manage

- Totally modular system for power scaling or for quickly adapting to business changes.
- Standardised system and modules covering a wide range of power and back-up times.
- Repeatable and standardised scalable architecture for time-saving design for different configuration & architecture requirements.

Pay as you need

- No prior expenditure for unpredictable future extensions in power and back-up time.
- Space saving thanks to reduced footprint and front access.
- Eliminates installation rework costs when new capacity is required from IT physical infrastructure.
- No risk of design oversizing due to project data uncertainty.

Everything front-access

- Connections, switches, manual bypass, auxiliary mains static bypass, power modules and all the electric parts have front-access.
- Total footprint is not increased as rear extra clearance for maintenance is not needed.
- Easy, quick, comfortable, safe and risk-free installation and maintenance.
- More reliable system.

The benefit of a totally redundant design

Total resilience

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

Optimum reliability

- Power module designed for superior robustness proved by an independent body (MTBF > 1,000,000 hr).
- Hybrid bypass architecture with distributed module's bypass and centralized mains bypass for ultimate reliability and robustness.
- Highly robust auxiliary mains bypass (MTBF > 10,000,000 hr).
- Acid leak-proof modular battery box.

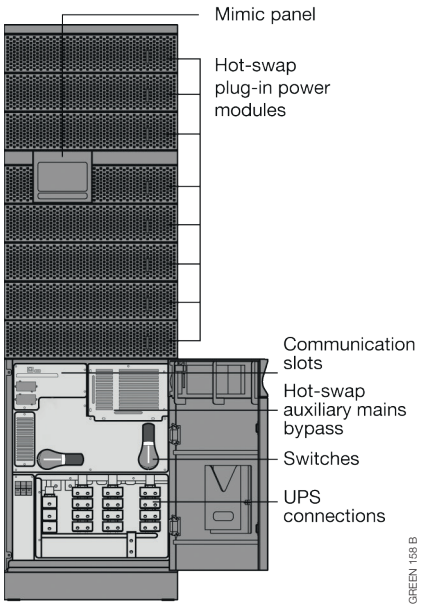
Maximum availability

- 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.

Cost-effective redundancy

- No need to duplicate the system hardware to get redundancy.
- Redundancy achievable simply by adding one more power and battery module.
- Redundancy can be easily combined with power scalability.
- Upgrading and/or power module replacement can be done by simple plug-in without any commands to the system.

A flexible modular UPS system



25-200 kW

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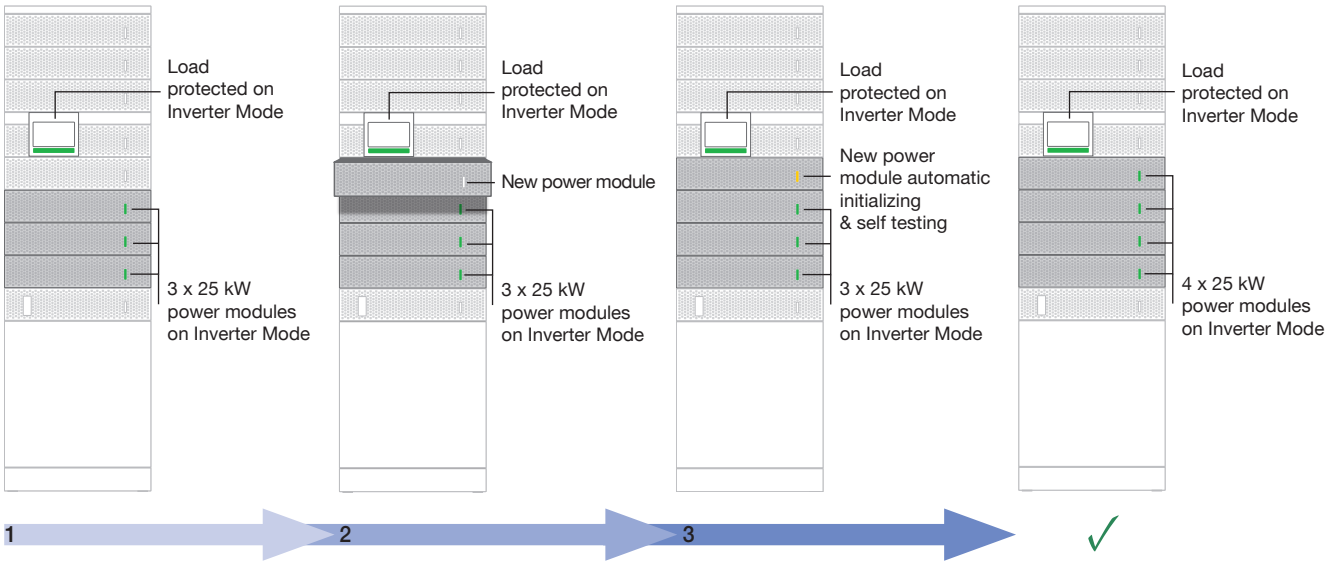
Seamless and risk-free scalability & upgrading

- MODULYS GP-UL protects critical loads in all conditions, including power upgrading and maintenance procedures.
- No risk of human error and downtime.

On-line power scalability

- MODULYS GP-UL allows you to increase power scalability and redundancy while keeping the load protected on inverter mode simply by plugging-in a new power module and waiting for its automatic self-configuration, without any human intervention.

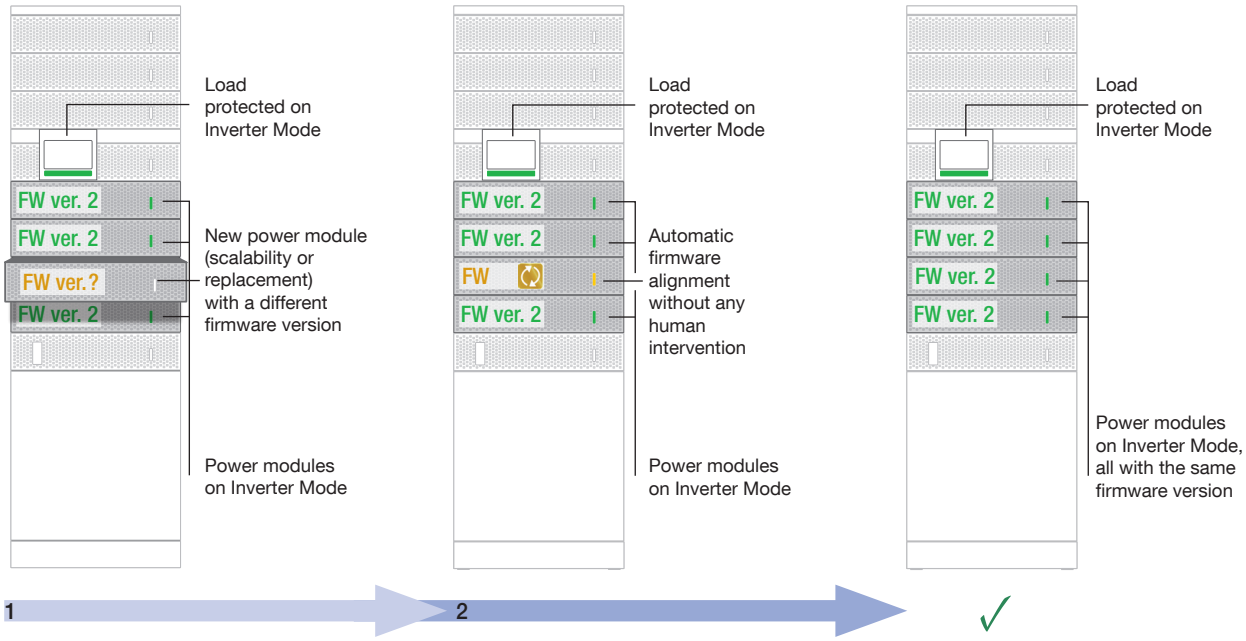


Power module automatic firmware alignment

- Even the power module firmware alignment is totally risk free.
- When a new power module is plugged in, the system checks what firmware version is embedded and if it is different automatically aligns it to one of the other modules. The load is protected at all times while running on inverter mode.

On-line global firmware update

- It is also possible to upgrade the global firmware without switching to bypass to keep the load protected on Inverter mode.
- Automatic procedure for a risk-free firmware upgrade.



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Three-phase UPS

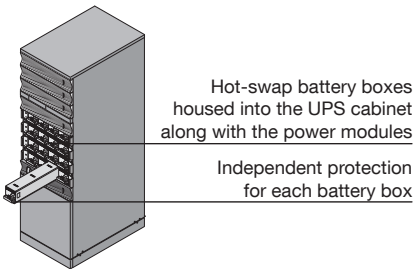
from 25 to 100 + 25 kVA/kW

Flexible and modular back-up times

MODULYS GP-UL offers modular solutions to meet all your requirements for back-up times (whether a few minutes or several hours) without compromising flexibility and scalability.

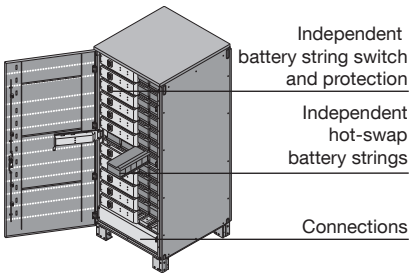
Internal hot swap battery

- Designed for short back-up time.
- Long-Life batteries available as standard.
- Compact solution with a small footprint.



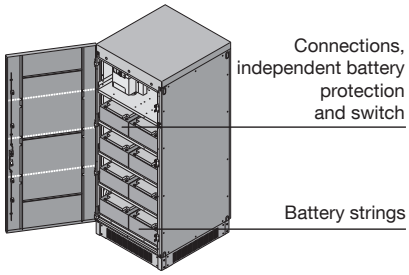
Modular hot-swap battery cabinets

- Designed for medium and long back-up times.
- Long-Life batteries available as standard.
- Vertical and horizontal modularity ensuring flexible back-up times.



Modular battery cabinet

- Designed for long back-up times.
- Long-Life batteries available as standard.
- Horizontal modularity ensuring flexible back-up times.



MODULYS GP-UL "Forever Young" concept

- MODULYS GP-UL excels not only in efficiency, flexibility, capacity management and sustainability - five aspects that are crucial for optimum performance.
- It employs an exclusive concept called 'Forever Young' which allows the life-cycle extension of MODULYS GP-UL and eliminates the criticality of system end-of-life.
- It also keeps the system open for the implementation of future technology improvements without modifying the infrastructure.

The 'Forever Young' concept:

- Is based on electronic-free (failure-free) cabinets where the components that are subject to ageing are all plug-in and therefore quick and easy to replace.
- Allows life-cycle extension via periodic replacement of power modules before they start ageing.
- Provides an always up-to-date system that uses the latest technology.
- Assures power modules and spare part compatibility and availability for more than 20 years.