CATALOGUE EXTRACT

Modular UPS and Static Transfer Systems ULTIMATE Power Protection



When energy matters



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Ultimate

UPS - Modular solutions





MODULYS GP

25 to 600 kVA/kW



MODULYS RM GP 25 to 75 kVA/kW p. 8

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MODULYS XL 200 - 4800 kVA/kW p. 18

Fault-tolerant power without compromise



Modular and redundant solutions strongly designed to anticipate an event and predict a fault in order to ensure maximum availability.



p. 12



STATYS Hot Swap 19" rack system 32 to 100 A p. 22





STATYS Integrable Chassis (OEM) 200 to 1800 A p. 22



MODULYS XS

The ultimate modularity for the most critical environments

from 2.5 to 20 kVA/kW



Designed with no single point of failure, the MODULYS XS offers high availability and redundant power supply to very critical applications.

With its flexible modularity providing seamless and risk-free power scalability up to 20 kW, the MODULYS XS range is the ideal solution for unscheduled site upgrades or incremental power evolutions. The installed power can be increased up to 20 kW by adding hot-swap plug-in power modules for incremental steps of either 2.5 kW or 5 kW.

Fully modular system

- Pluggable and hot-swapped power module with system's self-setting during installation.
- All the modules can be swapped without switching to external manual bypass.
- Hot swappable battery module designed to be installed with power module in the same UPS enclosure.

'Forever Young' concept

- Eliminates end-of-life criticality.
- Module compatibility guaranteed for 20+ years.
- Allows for the implementation of future module technology.

Totally redundant design

- N+1, N+X redundancy level.
- Totally independent power modules to avoid any single point of failure.
- Real selective module disconnection with galvanic separation.
- Distributed parallel control.

Enhanced serviceability performance

- Fast & safe maintenance based on hot-swap modules.
- Designed for concurrent maintenance.

The solution for

- > Small data centres
- > Edge data centres
- > Branch office
- Computer networks
- > Telecom & media nodes
- > Light industrial applications
- > Transportation control/signals

Strong points

- > Fully modular system
- Totally redundant design
- > 'Forever Young' concept
- Enhanced serviceability performance

Compliance with standards

- > IEC 62040-1
- > IEC 62040-2
- > EN 50581
- > IEC 63000

Certifications and attestations









MODULYS XS Single-phase UPS from 2.5 to 20 kVA/kW

Standard electrical features

- Dual input mains.
- Built-in backfeed protection.
- EPO (Emergency Power Off).
- EBS (Expert Battery System) for battery management.
- Tropicalised (Conformal Coating) boards.

Standard communication features

- User-friendly 7" touch-screen multilingual colour graphic display (MC models).
- LCD multilingual graphic dispaly (RM & TC models).
- 2 slots for communication options.
- USB port to download UPS report and log file.
- Ethernet port for service purpose.

Communication options

- Dry-contact interface (configurable voltage-free contacts).
- MODBUS RTU RS485 or MODBUS TCP.
- BACnet/IP interface.
- NET VISION: professional WEB/ SNMP Ethernet interface for secure UPS monitoring and remote automatic shutdown.
- IoT gateway for Socomec cloud services and SOLIVE UPS mobile app.
- Remote touch-screen panel.

Remote monitoring and cloud services

- LINK-UPS: 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.

Technical data

				MODULYS XS					
UPS SYSTEM									
Model			MC	R	M	TC			
Slot		9	6	4	3	3			
Power (Sn)			up to 20 kVA		up to	15 kVA			
Power (Pn)			up to 20 kW up to 15 kW						
Power factor		1							
Number of power modules			4			3			
Input/Output				X/1					
Redundant configuration				N+x					
INPUT									
Rated voltage			230 V 1ph+i	V (±20%), 400 V 3p	h+N (±20%)				
Frequency				50/60 Hz ±10%					
Power factor				> 0.99					
OUTPUT									
Voltage			230 V (1ph) ±	± 3% (can be set 20	8/220/240 V)				
Frequency			50/60 Hz ±2% (±0.1% in battery mode)						
Overload		110% for 1 minutes, 130% for 10 seconds, 200% for 5 cycles							
BYPASS									
Voltage		rated output voltage ±15%							
Frequency		50/60 Hz ±2% (configurable for GenSet compatibility)							
EFFICIENCY									
Online double conversion m	node			up to 92.8%					
ENVIRONMENT									
Ambient temperature			0 to 40 °C (15	to 25 °C for maxim	um battery life)				
Relative humidity		0 to 95% without condensation							
Maximum altitudine		2000 m without derating							
UPS CABINET									
Display		7"	touch	3.5"					
	W	550	550	449	449	600			
Dimensions (mm)	D	635	635	570	570	600			
	Н	1460	1060	708	575	1400			
Weight (kg) (empty cabinet)		120	90	50	44	140			
Colour		RAL 7016							
Degree of protection		IP20							
STANDARDS									
Safety		IEC 62040-1: 2017 (CB Report)							
EMC		IEC 62040-2: 2005							
Product declaration		CE; RCM; EAC							

Unit dimensions and weights



Plug-in Power Module
 Plug-in Battery Module

3. Plug-in Battery Pack

Weight (kg)

	POWER MODULES				
Power (kVA/kW)	2.5	5			
Input/Output	1/1	X/1			
Dimensions (mm) W x D x H	446x475x131	446x475x131			
Weight (kg)	14	18			
	BATTERY MODULE				
Battery voltage	48 V				
Dimensions (mm) W x D x H	446x475x131				

	BATTERY PACK
Туре	sealed lead-acid (normal-life & long-life)
Battery voltage	48 V
Weight (kg)	9



MODULYS XS Single-phase UPS from 2.5 to 20 kVA/kW

MODULYS XS MC: for critical IT & non-IT applications

Total resilience

- Electronics-free (failure-free) cabinet.
- Totally independent and self-sufficient power modules.
- No centralised control for parallel and load sharing management.

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.



MODULYS XS RM: for integration in 19" rack cabinets

Easy to integrate

- Specifically designed for integration in 19" standard rack cabinets.
- Adjustable rails and mounting accessories.
- Easy to manage, integrate and customise.
- Flexible simplified cabling



Compact sub-rack enclosure 2 3 1. 5 1. Ethernet port 2. USB port 3. 2 slots for communication options 4. 2 full power output sockets (IEC 320) 108 5. Output socket for Power Share \bigcirc $\bigcirc \bigcirc$ MOD (IEC 320)



MODULYS XS TC: for long autonomy requirement

Fast recharge, long backup time

- Specially designed for:
- telecommunication applications,
- installation in remote unmanned places,
- standard long-life batteries,
- robust metallic enclosures.

Powerful battery charger -LCD multilingual

Slot for hot-swap plug-in power modules

100/200 Ah high capacity batteries with front terminal



MODULYS XS "Forever Young" concept

- It eliminates issues surrounding the criticality of the UPS system's end-of-life.
- It is based on:
 - a modular, electronics-free UPS cabinet thus failure-free and with no ageing,
 - plug-in components quick and easy to replace avoiding ageing issues.
- It allows the life-cycle of the MODULYS XS to be extended via periodic hot-swap replacement of power modules and other electronic parts before they start to age and wear out.
- Each renewal:
 - ensures a new start for the MODULYS XS system's life-cycle, - avoids all the problems and risks associated with substituting the UPS,
 - provides an always up-to-date system, as the new parts will incorporate the latest technology.







MODULYS RM GP

Rack-mounted modular UPS system

from 25 to 75 kVA/kW



Full rack integration

- Designed for easy and no-risk integration in 19" 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

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

'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.
- Company declaration of 20-year compatibility.

The solution for

- Integration in 19" standard rack cabinets
- Computer rooms
- > Data centers
- Edge Computing
- > Banks
- > Healthcare facilities
- > Insurance
- > Telecom
- > Infrastructures

Certifications and attestations



Green Power 2.0 MODULYS RM GP module is certified by TÜV SÜD with regard to product safety (EN 62040-1).

Green Power 2.0 MODULYS module efficiency & performance are tested and verified by TÜV SÜD.



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



Advantages



lighest rack-mounted UPS power density on the market

kW

kVA











High efficiency Rea minimises energy batt consumption and rech reduces energy costs





MODULYS RM GP Three-phase UPS from 25 to 75 kVA/kW

Standard electrical features

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

Electrical options

- 19" 4U battery rack.
- External battery cabinet.
- High capacity battery charger.

Standard communication features

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

Technical data

Model

Communication options

- Dry-contact interface (configurable voltage-free contacts).
- MODBUS RTU RS485 or MODBUS TCP.
- 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 touch-screen panel.

Remote monitoring and cloud services

- LINK-UPS: 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.

15U

MODULYS RM GP

Total resilience

- Electronics-free (failure-free) sub-rack enclosure.
- Totally independent and self-sufficient modules.
- Real module selective disconnection (automatic inverter bypass with galvanic separation).
- No centralised control for parallel and load sharing management.
- Totally segregated, fully sized and centralised auxiliary mains 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).
- Hybrid bypass architecture with distributed module's bypass and centralised mains bypass for ultimate reliability and robustness.
- 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.

Number of power modules 1 to 2 x 25 kW 1 to 4⁽¹⁾ x 25 kW N, N+1 redundant Configuration Power (Sn) 25 to 50 kVA 25 to 75 kVA Power (Pn) 25 to 50 kW 25 to 75 kW Input/output 3/3 INPLIT 400 V 3ph+N (340 V to 480 V) Voltage Frequency 50/60 Hz + 10%Power factor / THDI > 0.99 / < 1.5%OUTPUT 380/400/415 V ±1 % 3ph+N Voltage Frequency 50/60 Hz ±0.1% Voltage distortion < 1 % (linear load), < 3 % (non-linear load according to IEC 62040-3) Short-circuit current up to 3 x In 125 % for 10 minutes, 150 % for 1 minute Overload Crest factor 3.1 HOT-SWAP BYPASS Voltage Rated output voltage $\pm 15\%$ (configurable from 10% to 20%) Frequency 50/60 Hz ±2% (configurable for GenSet compatibility) Weight 7.5 ka 7 kg EFFICIENCY (TÜV SÜD VERIFIED) up to 96.5% Online double conversion mode 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) Acoustic level at 1 m < 53 dBA 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 ka 42 ka Degree of protection IP20 HOT-SWAP POWER MODULE Height 311 Weight 34 kg Hot plug-in/Hot-swappable Туре MTBF > 1000000 hours (calculated and verified) HOT-SWAP BATTERY RACK Acid leak-proof - Long Life batteries Type 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 EN 62040-1, EN 60950-1 Safety EN 62040-2 Class C2 EMC EN 62040-3 (VFI-SS-111) Performance CE, RCM (E2376), EAC Product declaration

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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
- Remote monitoring service



(1) 4th module is for redundancy

MODULYS RM GP Three-phase UPS

from 25 to 75 kVA/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
- 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

 Designed for complete integration in any 19" standard rack cabinet.





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.



MODULYS RM GP Three-phase UPS from 25 to 75 kVA/kW

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 set up.
- · 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.

Compact 15U sub-rack enclosure

> Designed for complete integration in any 19" standard rack cabinet.



Pre-cabled rack with maintenance bypass

M4-R-075-82B0 15U rack, 4 slots M4-R-050-82B0 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 + 2 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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MODULYS GP

Unique, fully modular and redundant solution

from 25 to 600 kVA/kW



With its flexible modularity providing seamless and risk-free power scalability up to 600 kW, the MODULYS GP range is the ideal solution for unscheduled site upgrades or incremental power evolutions. The installed power can be increased up to 600 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 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 programme.
- Eliminates end-of-life criticality.
- Based on an electronics-free cabinet + 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 centralised 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 hotswap parts (power modules, auxiliary mains bypass, electronic boards).
- Load fully protected in double conversion mode (VFI) during power module replacement.
- 3-colour 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
- > Dacentres
- > Banks
- > Healthcare facilities
- > Insurance
- > Telecom
- > Transport

Advantages

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

Certifications and attestations



Green Power 2.0 MODULYS GP is certified by TÜV SÜD with regard to product safety (EN 62040-1). Green Power 2.0 MODULYS GP efficiency & performance are tested and verified by TÜV SÜD



Green Power 2.0 MODULYS GP power module MTBF

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.



Advantages





MODULYS GP Three-phase UPS from 25 to 600 kVA/kW

Standard electrical features

- Dual input mains.
- Internal maintenance auxiliary mains bypass.
- 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.
- ACS synchronisation system.
- Internal backfeed isolation device.
- Gen-set compatibility (via dry-contact interface).

Standard communication features

- User-friendly 7" touch-screen multilingual colour 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.
- REMOTE VIEW PRO supervision software.

Technical data							
		MODULYS GP					
	UPS SYSTEM						
Power (Sn)	25 to 200 kVA	25 to 400 kVA	25 to 600 kVA				
Power (Pn)	25 to 200 kW	25 to 400 kW	25 to 600 kW				
Number of power modules	1 to 8	1 to 16	1 to 24				
Input / output		3/3					
Redundant configuration	N+x						
INPUT							
Voltage	400 V 3ph+N (340 V to 480 V)						
Frequency		50/60 Hz ±10%					
Power factor / THDI		> 0.99 / < 1.5%					
OUTPUT							
Power factor		1 (according to IEC/EN 620	040-3)				
Voltage		380/400/415 V ±1% 3pl	h+N				
Frequency		50/60 Hz ±0.1%					
Voltage distortion	< 1	% (linear load), < 3% (non-linear load ac	cording to IEC 62040-3)				
Short-circuit current		up to 3 x In					
Overload		125% for 10 minutes, 150% fo	or 1 minute				
Crest factor	3:1						
BYPASS							
Voltage	ra	ted output voltage $\pm 15\%$ (configurable v	vith from 10% to 20%)				
Frequency		50/60 Hz \pm 2% (configurable for GenS	Set compatibility)				
EFFICIENCY (TÜV SÜD VI	FFICIENCY (TÜV SÜD VERIFIED)						
Online double conversion mode		up to 96.5%					
ENVIRONMENT							
Ambient temperature		0 °C to 40 °C (15 to 25 °C for maxin	num battery life)				
Relative humidity		0 to 95% without condens	sation				
Maximum altitude		1000 m without derating (300	0 m max)				
Acoustic level at 1 m		< 55 dBA					
SYSTEM CABINET							
Width	600 mm	2 x 600 mm (combinable system) 2010 mm (fully integrated solution)	3 x 600 mm (combinable system) 2610 mm (fully integrated solution)				
Depth		890 mm					
Height		1975 mm					
Weight (empty cabinet)	210 kg	2 x 210 kg (combinable system) 780 kg (fully integrated solution)	3 x 210 kg (combinable system) 1010 kg (fully integrated solution)				
Degree of protection		IP20					
STANDARDS							
Safety		IEC/EN 62040-1, AS 62040.1.1, A	AS 62040.1.2				
EMC	IEC/EN 62040-2 Class C2, AS 62040.2						
Performance	VFI-SS-111 - IEC/EN 62040-3, AS 62040.3						
Seismic compliance	Uniform Building Code UBC:1997, IEC 60068-2-57:2013						
Environmental	IEC/EN 62040-4						
Product declaration	CE, RCM (E2376), EAC						
POWER MODULE							
Height		3U					
Weight		34 kg					
Туре	Hot plug-in / Hot-swappable						

> 1 000 000 hours (calculated and verified)

- IoT gateway for Socomec cloud services and SOLIVE UPS mobile app.
- Remote touch-screen panel.

Remote monitoring and cloud services

- LINK-UPS: 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.

Hybrid bypass architecture

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



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
- > 24-hour call out and rapid on-site repairs
- > Maintenance packages
- > Training
- > Remote monitoring service



MTBF

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 centralised control for parallel and load sharing management.
- Totally segregated, fully sized and centralised 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 centralised 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



 Innovative base plates simplify the installation and allow a tidy and segregated cabling for higher system reliability.

Combinable system

BREN 159 /



- It allows the creation of a system when: an external coupling cabinet is already present (i.e. in case of replacement of an existing UPS),
 - a coupling cabinet with a special configuration is required and it has to be developed specifically,
 - the UPS system cabinets cannot be installed side-by-side.



25-200 kW

Catalogue extract 2020



MODULYS GP Three-phase UPS from 25 to 600 kVA/kW

Fully integrated solution: easy and safe installation



Innovative base plates simplify the installation.



Cabinets are easy to move (no pallet truck required), position and assemble.



Simplified cable positioning and risk-free connections.



Safe, reliable and time-saving cabling management.



Easy cabling for a tidy and reliable solution.



Automatic self-configuring & self testing hot-swap plug-in power modules.





Seamless and risk-free scalability & upgrading

- · MODULYS GP 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 allows you to increase power scalability and redundancy while keeping the load protected on inverter mode simply by pluggingin 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.





Flexible and modular back-up times

MODULYS GP 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 "Forever Young" concept

- MODULYS GP 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 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 electronics-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.







MODULYS XL

The ultimate modularity for the most critical environments from 200 to 4800 kVA/kW

The MODULYS XL is a modular UPS based on 200 kW power modules. The power of a single UPS unit can be increased up to 1200 kW and the system can include up to 4 units in parallel. The innovative MODULYS XL concept allows for the constant protection of the load in online mode, whether to respond to load growth or to manage all aspects of the system's lifecycle, in a secure way and with impressive rapidity.

Associated with a variety of adapted Services, the MODULYS XL provides unprecedented availability and flexibility to fulfil the requirements of today's highly critical applications.

3 standard bricks for your very own system

- UPS configurations based on 3 standard bricks for a simplified installation process.
- Repeatable and standardised assets to meet different configuration and architectural requirements.
- An adjustable number of empty power slots to match different scalability and redundancy needs.
- Complete UPS customisation without modifying the core standardised bricks.
- Quality, simplicity of construction and ease of operation.

5-minute plug-in

- Power module addition or removal in only 5 minutes by one person.
- Simple and safe power module plug-in: no power or communication bus cabling required.
- Load fully protected in double conversion mode during the power extension or module swap.
- Hot-scale and swap process in incremental steps of 200 kW to reduce time and optimise costs.
- Automatic power module self-configuration and testing before connection.
- Firmware auto-alignment.
- No installation rework when a new capacity is required.
- Off-powered connection of the power module to prevent electrical arcing upon plug-in and plug-out.

Safe and easy deployment

- Specifically engineered to eliminate unexpected installation errors.
- Easy power slot positioning and perfect alignment including on uneven floors.
- Power slots with pre-engineered built-in bus bars for quick, easy and clean interconnections.
- A full frontal access installation so the UPS can be installed against a wall.
- The power slots set up during the installation stage are ready for future hot plug-in power modules.
- Safe and easy power module handling.
- Full system heat-run test capability during commissioning without the need for an external load bench.

Concurrent and risk-free maintenance

- Concurrent maintenance of all components.
- Safe power module maintenance outside of the running system.
- Both the power modules and the static bypass can be maintained while the load remains fully protected in double conversion mode.
- No in-situ maintenance, service or repair that may jeopardise the running system.
- Fully extractable power modules and subassemblies and complete access to all components, reducing the MTTR.
- Built-in means to perform an exhaustive pre-test after the module's maintenance.

The solution for

- > Data centres
- > Buildings
- Industry

Strong points

- 3 standard bricks for your very own system
- > 5-minute plug-in
- > Safe and easy deployment
- > Concurrent and risk-free
- maintenance

Compliance with standards

- > IEC 62040-1
- > IEC 62040-2
- > IEC 62040-3
- > IEC 62040-4











MODULYS XL Three-phase UPS from 200 to 4800 kVA/kW

Flexible UPS architecture

- Hot-scalable power capability.
- Adjustable redundancy level.
- Common or separated rectifier and bypass mains.
- Compatible with different energy storage technologies (e.g. Li-lon, Ni-Cd...).

Standard electrical features

- · Separated inputs (rectifier, bypass).
- Top or bottom cable entry.
- Backfeed protection: detection circuit.
- Redundant bypass cooling.
- Distributed batteries (1 per module).
- Battery temperature sensor.
- Module heat-run test(3).
- Full system heat run test⁽³⁾.
- 63 A three-phase plug.

Electrical options

- · Input, output and maintenance bypass switches.
- 3-wire bypass and output distribution kit.
- PEN kit for TN-C grounding system.
- 4-wire rectifier (neutral connection kit).
- Shared batteries (1, 2 or 3 per unit).
- · Enhanced battery charger.
- Battery tripping kit.
- Unit parallelisation kit.
- Redundant electronic power supplies.
- BCR (Battery Capacity Re-injection).
- ACS synchronisation system.

MODULYS XL

- Cold start.
- Top roof.

Standard communication features

- User-friendly 7" touch-screen multilingual colour graphic display (Power Hub).
- Tricolour display with a number indicating the Power Module status (Power Slot)
- 2 slots for communication options.
- USB port to download the UPS reports and log files.
- Ethernet port for service purposes.

Communication options

- Dry-contact interface (configurable, voltagefree contacts).
- 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 the SOLIVE UPS mobile app.
- Remote touch-screen panel.
- Additional Com-slot extension.

Remote monitoring and cloud services

- LINK-UPS: Socomec's 24/7 remote monitoring service connecting your installation to the nearest Socomec Service Centre.
- SOLIVE UPS: a mobile app to monitor all your UPS systems from a smartphone.

Unit dimensions and weights



	Unit					
Number of Power Slots	3	4	5	6		
Maximum power (kVA/kW)	600	800	1000	1200		
Width ⁽¹⁾ (mm)	2890	3440	3990	4540		
Weight ⁽²⁾ (kg)	2500	3100	3650	4250		

(1) Width includes left and right side panels (2) Weight for the unit fully equipped with power modules.

Product declaration (1) Conditions apply. (2) At full rated voltage: with input THDV <1%

(3) Without dummy load bench.

Online efficiency (double conversion mode)



Technical data

Power Module rated power

Redundant configuration

Voltage distortion (Ph/Ph)

RECTIFIER INPUT Voltage

Power factor/THDI OUTPUT

UPS UNIT

Frequency

Power factor

Frequency

BYPASS

Voltage

Weight

Type

MTBF

Frequency

POWER HUB Dimensions W x D x H Weight POWER SLOT Dimensions W x D x H

POWER MODULE

Dimensions W x D x H Weight

ENVIRONMENT Operating ambient temperature

Relative humidity

Maximum altitude

STANDARDS

Performance

Environmental

Safety FMC

Acoustic level at 1 m

Short-circuit withstanding (Icw)

Voltage

Unit rated power Number of Power Modules Number of Power Slots Number of Units per System

200 kVA/kW
200 to 1200 kVA/kW
1 to 6
1 to 6
up to 4 units in parallel
N+x
00 V 3ph (200 to 480 V ⁽¹⁾)
50/60 Hz ±5 Hz
>0.99 / <2.5%(2)
ccording to IEC/EN 62040-3)
3ph+N (380/415 V configurable)
onfigurable) ±0.01 Hz - free-running
ThdU \leq 1.5% (linear load)
tput voltage ±15% (configurable)
ty ±5 Hz (configurable for Genset compatibility)
1200 x 975 x 2120 mm
750 kg

1 (2

400 V

Rated ou

rated output frequence

50/60 Hz (0

550 x 975 x 2120 mm 130 kg

500 x 950 x 1940 mm 450 kg Hot plug-in / Hot-swappable 1 000 000 hrs

from 0 °C to +40 °C 0-95 % without condensation 1000 m without derating

up to 97%

<75 dBA 100 kA - Symmetrical

IEC/EN 62040-1 IEC/EN 62040-2 IEC/EN 62040-3 IEC/EN 62040-4

CE, EAC

A modular UPS system designed for simplicity

The flexibility of a tailored solution combined with the advantages of standardised assets: MODULYS XL can be fine-tuned to the precise requirements of any electrical infrastructure. This approach saves time and money during both the project design and its deployment - with the option to pay as you go.

Power HUB



Power HUB for the UPS Unit

- Up to 1200 kVA/kW.
- Input, output and battery connections to the UPS unit.
- · Remote communication interfaces.
- User interface.
- Full rated centralized static bypass.
- 63 A three-phase plug for advanced maintenance services.



Power SLOT

- For 200 kVA/kW plug-in Power Module
- Pre-engineered built-in bus bars interconnection between the Power Hub and the others Power Slots.
- Pre-connected communication bus.



Power MODULE

- Rated for 200 kVA/kW permanent operating.
- · Single and full rated rectifier, inverter and battery charger.
- Double conversion side bypass.
- · Selective disconnection (contactors and fuses) at input and output stages.
- Local battery disconnection switch.
- Patented plug-in system (power and control) to connect to the Unit.

Flexible power & scalability

- A flexible combination of power slots to address different needs.
- Installation of the power slots at the initial stage allows for quick and safe scalability.
- A power increase to meet changing capacity demands.
- The load is fully protected in double conversion mode during power extensions and maintenance.







Scalability up to...

pre-connected at the initial stage Power slots can be easily added

later (in off-line mode)

MODULYS XL Three-phase UPS from 200 to 4800 kVA/kW

Ultimate resilience

A granularity of 200 kW

- Perfect balance between MTBF and intrinsic redundancy.
- Reduced losses in available power due to missing modules.
- Minimised number of potential problems and associated maintenance costs compared to solutions with an excessive numbers of modules.

No single point of failure

- The control system is not centralised to eliminate the typical weak point of some modular UPS systems.
- Like for monolithic UPSs, the Power Modules and the static bypass operate on a peer-to-peer basis to avoid any single point of failure and to ensure the maximum system availability.

Clean installation

 The MODULYS XL pre-engineered power and control interconnections make for an extremely clean UPS system – essential for guaranteeing maximum availability.

Flexible parallel configurations

To provide maximal flexibility and guaranty system availability when maintaining a single power module, the MODULYS XL units can be parallelised without restriction on the number of installed power slots or power modules.

- Parallel configuration up to 4 units.
- Free unit(s) configuration.
- Free number of power modules at each unit level.

The right granularity and no single point of failure at system level

- 200 kVA/kW power module built by single and full rated power converters.
- Totally independent and self-sufficient power modules.
- Hybrid bypass: fully sized (up to 1200 kVA) centralised static bypass together with distributed modules bypasses.
- Real power module selective disconnection (input and output controlled galvanic disconnectors).
- Straightforward interconnections resulting in a clean installation.
- Mechanical segregation between each of the sub-asset building the UPS unit.





Move to a permanent uptime mode with an innovative service approach



The availability of your critical application restored in a few minutes.

To maximise your MTTR, in a matter of minutes, an emergency power module – located near your premises – can be used to replace another one.

First time fix rate

The power module is repaired while disconnected from the live UPS system, thus maintaining the critical load safely supplied. The online repair guide and full power warm-up test provide reliable and certified results.

Fast and safe maintenance operation

MODULYS XL is engineered for quick and simplified module plug-in without being in bypass mode - avoiding load downtime risk.



24/7 monitoring⁽¹⁾

In the event of any type of anomaly, the system will instantly notify the nearest Socomec Service Centre and an engineer will be dispatched immediately along with any spare parts that may be needed. (1) After subscribing to a Socomec Maintenance Contract with Link-UPS option.



STATYS

Redundant design for power availability and site maintainability from 32 to 1800 A

STATYS provides

- High reliability internal redundant design to ensure service continuity.
- Flexibility and adaptability to various types of applications.
- Compact design: saves up to 40% of valuable space.
- Easy and secured maintenance.
- Operational security and ease of use. Remote data access in real time and from any location.
- Full support and service.

Static Transfer Switch: user benefits

Supplied by two independent alternate sources, STATYS increases the overall electrical infrasrtucture availability during abnormal events and programmed maintenance.

- Provides redundant power supply to mission critical loads to increase global uptime of the supplied system.
- Increases the power supply availability by choosing the best power supply quality.
- Provides plant segmentation and prevents fault propagation.
- Allows easy extension and easy infrastructure design, ensuring high availability of the power supply to critical applications.
- Facilitates and secures the maintenance or the modifications of the overall electrical installation (source, distribution, switchboard) while the load is kept supplied.

STATYS also provides protection against:

- Main power source outage.
- Failures in the upstream power distribution system.
- Failures caused by faulty equipment supplied by the same source.
- Operator errors.

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Flexibility

STATYS offers a wide range of single-phase and three-phase systems that suits all types of applications and power supply systems. Dual or single cord servers, linear or non-linear loads, IT or electromechanics are just some of the load types that STATYS can supply. Wherever a smart power source is needed, whether for existing or new electrical plants, STATYS can be easily installed and efficiently supply the load.

It is available in:

- 2 wires and 2 poles switching, to be connected between phase/neutral or phase/phase.
- 3 wires arrangement without neutral,
- for reduced cable costs,
 for local zoning of the applications by using
- insulating transformers,
- 4 wires three-phase arrangement with neutral, with or without neutral pole switching,

STATYS offers:

- Flexible digital control capacity that can adapt to any operational or electrical environment conditions,
- Capability to manage synchronised and non-synchronised sources according to load specificity,
- Advanced Transformer Switching Management (ATSM). If the upstream network has no distributed neutral cable, two upstream transformers or one downstream transformer can be added to create a neutral reference point at the output. For the downstream solution, STATYS, thanks to ATSM, correctly manages the switching to limit inrush current and avoid the risk of spurious breakers.

The solution for

- Finance, banking and insurance
- Healthcare sector
- > Telecom & Broadcasting
- Industry
- > Power generation plants
- Transport

Advantages



Our dedicated Expert Services for UPS

We offer services to ensure your UPS highest availability:

- Commissioning
- > On-site intervention
- > Preventive maintenance visits

www.socomec.com/services

- > 24-hour call out and rapid on-site repairs
- > Maintenance packages
- > Training



Single-phase and three-phase STS from 32 to 1800 A

High reliability - Internal redundant design

Main features:

- Redundant control system using double microprocessor control boards.
- Dual redundant power supplies for control boards.
- Individual control board with redundant power supply for each SCR path.
- Integrates an "auto-hold" feature to ensure load continuity in case of internal failure.
- Redundant cooling with fan failure monitoring.
- Real-time SCR fault sensing.
- Separation of main functions to prevent internal fault propagation.
- Robust internal field communication bus.
- Internal monitoring of sensors to ensure maximum system reliability.

Compact design

- Small footprint and compact units.
- Adjacent or back to back mounting.
- Integrable chassis version for optimal implementation into switchboards.
- Front access for easy maintenance.Compact Hot Swap 19" rack system.

Standard features

- A smart and flexible transfer system that can be configured according to the type of load.
- Synchronised and non-synchronised sources compatibility (configurable synchronisation tolerance and switching management).
- Fuse-free or fuse-protected design.
- Output fault current sensing.
- Internal CAN Bus.
- Double maintenance bypass.
- Neutral oversizing for non-linear loads compatibility.
- Embedded Inputs, output and maintenance bypass switches (cabinet version).

Standard communication features

- LCD or user-friendly 7" touch-screen multilingual graphic colour display.
- Slots for communication options.
- Dry-contact interface (configurable voltage-free contacts).
- Ethernet interface for STS monitoring via WEB pages.
- MODBUS TCP.
- Full digital configuration and setting.

Options

- Dry-contact interface.
- (configurable voltage-free contacts).MODBUS RTU RS485.
- PROFIBUS / PROFINET gateway.
- REMOTE VIEW PRO supervision software.

Technical data

STATYS	19" rack - hot swap -1ph 19" rack - hot swap -3ph Cabinet - integrable chassis (OEM)													
Rating [A]	32	63	63	100	200	300	400	600	800	1000	1250	1400	1600	1800
ELECTRICAL SPECIFICATIONS	3													
Rated voltage	120-12 240/2	120-127/220 240/254 V 208-220/380-415/440 V												
Voltage tolerance						± 10%	(configura	ble)						
Non-synchronized sources management						configurab	le up to +	/- 180						
Frequency					50 I	Hz or 60 Hz	(± 5 Hz (co	onfigurable)					
Number of phases	ph+N or ph	ph+N or ph-ph (+ PE) 3ph+N or 3ph (+ PE)												
Number of poles switching	2-pole s	witching					3 0	r 4-pole sw	vitching					
Maintenance bypass (cabinet version)		interlocked and secured												
Overload		150 % for 2 minutes - 110 % for 60 minutes												
Efficiency		99%												
Admissible power factor						no re	estrictions							
ENVIRONMENT														
Operating ambient temperature						0	-40 °C							
Relative humidity		95%												
Maximum altitude		1000 m a.s.l. without derating												
Acoustic level at 1 m (ISO 3746)	<45 dBA ≤ 60 dBA ≤ 84 dBA													
STANDARDS	STANDARDS													
Safety	IEC 62310, IEC 60529, AS 62310, AS 60529													
EMC	C2 category (IEC 62310-2, AS 62310.2)													
Product declaration	CE, RCM (E2376)													

Dimensions

Binnonono					
Model		Range (A)	Width (mm)	Depth (mm)	Height (mm)
1 phase	10" Back	32 - 63	483 (19")	747	89 (2U)
	19 Hauk	63 - 100	483 (19")	648	400 (9U)
		200	400	586	765
3 phases	Integrable Chassis (OEM)	300 - 400	600	586	765
		600	800	586	765
		800 - 1000	1000	950 ⁽¹⁾	1930
		1250 - 1800	910	815	1955
	Cabinet	200	500	600 ⁽¹⁾	1930
		300 - 400	700	600 ⁽¹⁾	1930
		600	900	600 ⁽¹⁾	1930
		800 - 1000	1400	950 ⁽¹⁾	1930
		1250 - 1600	2010	815	1955

(1) Depth does not include handles (+40 mm)





• USA (x3)

- Thailand
 Tunisia
 Turkey
 UK
 USA

HEAD OFFICE

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