

# MODULYS XM Modular UPS up to 600 + 50 kVA







# **MODULYS XM** Ultra-reliable and flexible UPS - built to last Up to 600 + 50 kW



50 to 250 + 50 kW

As flexible as it is reliable, the MODULYS XM - a medium power modular UPS - can be **configured to order**.

### Reliable 50 kW power modules



#### Automatic firmware alignment and self-setting



#### Modular bypass

**Increased short-circuit** capability thanks to an additional bypass module

# Need something unique to you?

25+ standardised and pre-engineered parts to customise your UPS

And what's more... ... it has a proven design life of more than **25 years!** 

### Top/bottom or mixed cabling



Flexible on-site cabling thanks to **native preset** 

### All switches inside

Optimised costs, footprint and functionalities thanks to **no additional** external **switchboard** 

### Full front access



Minimum global footprint with no extra clearance required



50 to 600 + 50 kW

**Proven ultimate reliability** Unique functionality beyond market standards - that's proven!

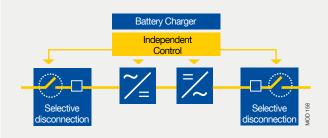
MODULYS XM has been designed for a range of applications, including the most critical. What that means is that this UPS has been engineered with the highest degree of reliability in mind.

<image>

Socomec

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Rugged and totally independent power modules



on the

#### 1,000,000 hours (certified)

Minimised failures and optimised TCO thanks to a MTBF 4 times better than the market standard.

#### +500 mating cycles

Heavy duty connectors - IEC 60512-9-1 certified.

### **Electrical segregation**

No fault propagation thanks to upstream and downstream galvanic insulation and smart selective disconnection.

### Certified system robustness

### x2 immunity (certified)

Enhanced robustness thanks to surge and burst resistance that is 2 times higher than EN62040-2 standard levels.

### Seismic resistance (certified)

Upper level of robustness thanks to UCB 97 zone 4 compliance.

### Full performance up to 40°C (certified)

Fully rated load (kW = kVA/PF out = 1) from low to high input mains and in temperatures between  $0^{\circ}$ C and  $40^{\circ}$ C.

### Fault-tolerant architecture

### **Fully redundant**

Power availability in all circumstances thanks to totally independent power modules and redundant parallel bus connection (ring configuration).

### **Distributed control**

No single point of failure thanks to internal parallel and load sharing management (no centralised control board).

### Hybrid bypass structure

Ultimate resiliency thanks tofully sized, centralized, autonomous and segregated static bypass - together with distributed modules bypasses.

# 

# High availability of your critical application restored in a few minutes

### 01 "Just a box to move"

- Full hot-swap.
- Complete front access.
- Electronic-free cabinet: no electronics fixed to the enclosure, complete access to all components.

## 02

### "Just unplug + plug-in"

- Add or change power modules in only 2 minutes.
- No specialist skills or engineering expertise required and no need to be concerned about firmware or parameter synchronisation.
- Fully automatic procedure with verified safety operation.

### 03 "Just proceed - protection is ON, your application is protected"

• Fully protected load - always protected in double conversion mode with no need to switch on bypass.



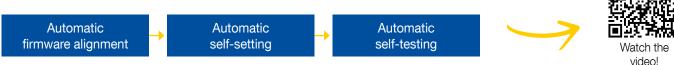
# **Risk-free maintenance**

When eliminating human error becomes a reality

### Full front access

- All components securely enclosed within plug-in boxes.
- Hands-outside servicing: move boxes without direct contact with live electronics, ensuring error-free operations.

### Minimal human involvement





### What's more? First-time-fix intervention

Thanks to digital services, you can now dramatically reduce your MTTR.

- Detect problems in real time thanks to 24/7 monitoring of your UPS via the SoLive mobile application,
- or let our experts do it for you via our remote monitoring service.
- Act in record time and reduce the number of on-site interventions thanks to remote diagnostics.



# Easy customisation - your UPS is unique as your needs are

MODULYS XM's exceptional configurability makes it the ideal choice for a wide range of applications. Whether you're implementing it within an existing setup or a brand-new installation, you can tailor the XM precisely to your needs. While some options may need to be chosen during the initial configuration, real flexibility remains throughout - and most options can be added at the installation site effortlessly, without the need for any further adjustments.

### One solution to cover every cabling need

### Adaptable system and simplified integration according to infrastructure requirements

With the same system solution, MODULYS XM is able to meet every cabling need. Top cabling? Bottom cabling? A mix of top-bottom cabling? MODULYS XM is ready!

#### Bottom cabling



Top cabling

Bottom cabling



Compatible with any grounding system: TN-S, TN-C, TT, IT.

## 25+ standardised and pre-engineered parts

Thanks to our standardised, pre-engineered parts, you have the flexibility to customise your UPS system, even last minute on-site, ensuring that it precisely matches your specific needs.

### To personalise the UPS architecture

- Power module to scale the power or increase system redundancy
- Bypass module to increase short-circuit capability or bypass redundancy
- Lithium Battery
- Lead Battery modular hot swap solution
- Lead Battery high capacity solution
- Automatic external synchro interface
- Cold-start

6

# **To connect** the UPS and access digital services

- IoT gateway for Socomec cloud services and the SoLive UPS mobile app
- Touch Screen Remote Mimic Panel
- WEB/SNMP Ethernet interface
- Programmable dry-contact interface
- Modbus TCP interface
- Profibus coupler interface
- Environmental monitoring device

# To adapt the UPS to the environment

- Seismic kit
- Top roof IP21 protection kit
- Interconnection kit for common mains
- PEN kit for TN-C grounding system
- External battery temperature sensor
- Environment temperature and humidity sensor
- Top-cabling cabinet
- Cabling kit for top-cabling
- Top-air exhaust kit
- Cover kit for system empty slot
- Lifting bolts

## High short-circuit solution on-demand

The MODULYS XM maintains compatibility even in situations where the short-circuit current exceeds its standard rating, demonstrating robustness and reliability when handling unexpected abnormal events and electrical loads.

### System short circuit performance

Short circuit current withstand (Icw)

Conditional short circuit current (Icc)





### What's more?

### Flexible Bypass short circuit capability

The MODULYS XM's short circuit capability can be increased on demand by simply inserting an additional plug-in bypass module into the system's empty slot.



# that the bypass can withstand without failure.

The bypass short-circuit capability is the maximum short-circuit current

## Compatible with Li-Ion battery technology

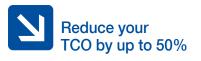
Ensuring the highest level of availability and reliability while reducing the Total Cost of Ownership, MODULYS XM - combined with the Socomec lithium offer - provides you with an optimised package to meet your installation constraints and free up space for revenue generating equipment.



More space for servers and IT.



Save CAPEX and OPEX by reducing the cost of cooling.



No battery replacement for up to 15 years even in high cycling conditions



Sustainable solution with lower environmental impact over the life cycle vs VRLA.

# High performance Proven long-lasting durability - 25+ years design lifetime

With a remarkable lifespan of 25 years and exceptional proven efficiency, this UPS is your steadfast partner in overcoming modern challenges, such as cost management and reducing your carbon footprint.

# With a lifetime of 25+ years, your UPS can be a keeper

By choosing equipment with an extended lifetime, or better still, equipment that's equal to the lifetime of your application, you can not only reduce your costs and avoid stress during the transition, but you can also make a positive impact on the environment. By designing a product that lasts, on average, the entire life of your installation, Socomec is committed to your priorities.

I always dread the moment when a UPS arrives at the end of ts life and needs replacing. It's not only the financial impact of a new UPS, but it's also the potential risks associated with replacement.

Data Centre facility manager

## How can we prove that?

#### Lifetime calculation and validation Declaration and data evidence MODULYS XM Third party validation MODULYS XM Lifetime calculation Lifetime declaration tests Components lifetime calculation in: Robustness tests • 25+ years • Data Centre conditions Data Centre conditions = • Worst-Case conditions (Ashrae Environmental Classes Stress test: - 110 °C ambient temperature for Data Centres) - 100 % load CAD simulations • 20+ years Electrical • Fast ageing test: Worst Case conditions • Thermical - 65°C ambient temperature - 100% load - 240 days



### Proven high efficiency, without compromise

High efficiency independently tested and verified by an international certification organisation across a wide range of loads, voltages and operating conditions, for certainty of performance in real operating conditions.

#### Energy Saver feature: maximise UPS global efficiency under partial load rate conditions.

- Load always protected in online double conversion mode (VFI).
- Automatically adapt the number of power bricks in hot stand-by mode, maintaining safe load protection with redundancy.
- Up to 96.5% efficiency above 15% load rating.
- Load step management feature sleep module will be awakened instantly.
- Rotating algorithm guarantees homogenous power brick ageing.

# **Expert services**

# Manufacturer's maintenance for trouble-free UPS operation

Our service contracts are tailored to customer needs, taking into account individual operational constraints, business processes and the unique level of criticality associated with specific applications. Whatever the issue, our internal escalation process gives us access to different levels of expertise to respond as quickly as possible.

Our service teams are fully trained and provided with certified equipment in order to deliver the highest levels of expertise.

### How does it work?

#### **SILVER**

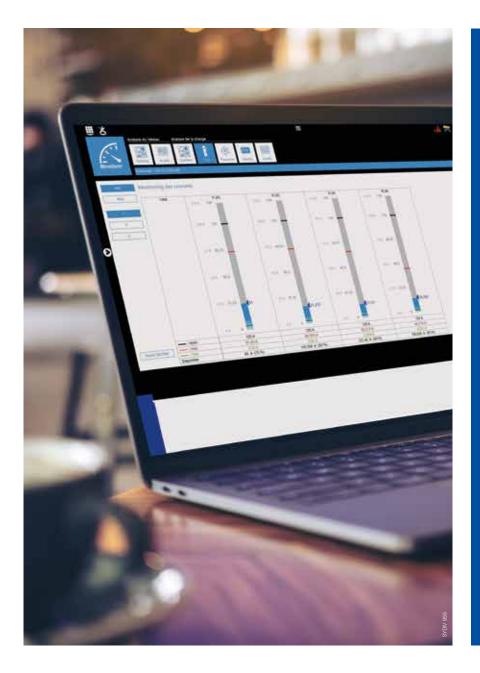
The ideal plan for **preventive maintenance**: inspection visits, access to the Socomec office hours hotline (8x5) and response times within 24 hours.

### GOLD

Prevent and cure: this package includes everything from the Silver plan, and also covers the cost of responding to breakdowns.

### **PLATINUM**

The PLATINIUM plan includes spare parts. For the most critical applications, the PLATINUM+ plan comes with a 6 hour response time and 24/7 hotline.



# Optimise your experience thanks to connectivity

#### SoLive

UPS monitored anywhere, anytime (cloud)

- Mobile App to monitor the UPS
- Overview of all installed units
- Real-time alarms and notificationsDashboard with operating
- parameters

#### SoLink

#### Proactive acknowledgement

- Alarm directly notifies the expert
- Proactive alarm check by the expert
- Expert calls and briefs the end user

#### Remote troubleshooting

#### **Remote troubleshooting**

- Quick intervention via remote access
- Immediate diagnosis and root
  cause analysis
- Only one on-site visit is required

# **Technical data**

	MODULYS XM			
Power	250 +50 kVA/kW	600 + 50 kVA/kW		
Module power	50 kW (up to 40° an	nbient temperature)		
Number of power modules	1 to 6	2 to 13		
Input / output	3,	/3		
INPUT				
Voltage	400 V 3ph+N (340 V to 480 V)			
Frequency	40/70 Hz			
Power factor / THDI	> 0.99 / < 1.5%			
OUTPUT				
Power factor	1 (according to IEC/EN 62040-3)			
Voltage	380/400/415 V ±1% 3ph+N			
Frequency	50/60 Hz (configuarble) ±0.1% free running			
Voltage distortion	< 1% (linear load), < 3% (non-linear load according to IEC 62040-3)			
Overload	125% for 10 minutes, 150% for 1 minute			
BYPASS				
Voltage	rated output voltage $\pm 15\%$ (configurable from 10% to 20%)			
Frequency	50/60 Hz ±2% (configurable for GenSet compatibility)			
Bypass short-circuit capability (Iтям)	up to 28 kАрк	up to 40 kАрк		
EFFICIENCY (TÜV SÜD VERIFIED)				
Online double conversion mode	up to 96.5%			
SHORT CIRCUIT PERFORMANCE				
Conditional short circuit current (Icc)	up to 65 kAnns			
Short circuit current withstand (Icw)	up to 50 kАямя	up to 65 kARMS		
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	< 57 dBA	< 64 dBA		
SYSTEM CABINET				
Width	600 mm	1200 mm		
Depth	890 mm	950 mm		
Height	1990	) mm		
Weight (empty cabinet)	253 kg	675 kg		
Degree of protection	IP	20		
STANDARDS	·			
Safety	IEC/EN 62040-1, AS 62040-1			
EMC	IEC/EN 62040-2 Class C3, AS 62040-2			
Performance	VFI-SS-11 - IEC/EN 62040-3, AS 62040-3			
Environmental	IEC/EN 62040-4			
Product declaration	CE, RCM, EAC, CMIM, UKCA			
POWER MODULE				
Height	3U			
Weight	36 kg			
Туре	Hot plug-in / Hot-swappable / self-setting / automatic firmware upgrade			
MTBF	> 1 000 000 hours (third party verified)			



### Different needs? Meet the rest of the modular family



MODULAR FAMILY				
	NODULYS XS	MODULIYS GP	MODULYS XI	
Range	2.5 to 20 kVA / kW Single-phase UPS Free standing or 19" rack	25 to 600 kVA / kW Three-phase UPS Free standing or 19" rack	200 to 4800 kVA / kV Three-phase UPS Free standing	
Safe and easy deployment	Retrofit a new module into a previous generation frame	Flexible on-site adaptability to manage last minute installation constraints	Pre-engineered interconnection bars for straightforward installation	
5-minute hot scale	Extremely flexible power module and battery module plug-in	Automatic firmware alignment and compatibility assured when scaling with a new module	Patented connection system allowing large power module plug-in	
Risk-free maintenance	Plug-in battery pack for easy replacement or extension	Every component and module can be hot-swapped	Unique heat-run test service procedure to certify "hands off" maintenance	
Superior resilience	20 years field-proven reliability across several different applications	Module MTBF certified by third party	Complete power module automatic and selective disconnection	



# Socomec: our innovations supporting your energy performance



- Italy (x2)
- Tunisia
- India
- China (x2)
- USA (x2)
- Canada

- Canada Dubai (United Arab Emirates) France (x2)
- Germany India Indonesia Italy Ivory Coast
- Netherlands 
  Poland 
  Portugal 
  Romania 
  Serbia
- Singapore Slovenia South Africa Spain Sweden
- Switzerland Thailand Tunisia Turkey UK USA

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