

# MODULYS EB

from 9 to 24 KVA

a modular UPS

for strategic applications

## A completely modular system

- **MODULYS® EB** is the most flexible and modular system in the entire range.

## For use under constraints

- Designed for the most demanding IT applications, such as data centres, ISP and ASP and call centres, **MODULYS® EB** guarantees unparalleled continuity of service. Offering a large number of available slots, it can be easily upgraded in terms of power and back-up time, and provides the essential redundancy required by these strategic applications.

## Full digital control technology

- **MODULYS® EB** is controlled by digital circuits. Their use allows for greater precision and ensures that the operating parameters of the whole system are stable over time.

## Top level communication solutions

- A complete range of solutions makes the **MODULYS®** range of UPS the most open and communicative on the market, adaptable to the environment of each and every user: RS232 serial interface as standard, dry contacts relay card, **NET VISION** SNMP/Web card and advanced communications card offering control of the environment (temperature, etc.) at the same times as a second RS 232/485 serial interface.

## On-Line double conversion technology (Voltage Frequency Independent VFI)

- The most effective technology for protecting data in the event of a power cut or low quality power supply. The inverter generates the output voltage and permanently supplies power to the application. Continuity and stability of both the voltage and frequency is thus ensured, irrespective of the mains input.



Your protection  
for

- > e.business
- > Server farms
- > Telecommunications
- > Medical



## The answer to all your needs

### Upgradable over time

- **MODULYS**® adapts easily to changes and to the growth of your system. SOCOMEC UPS is the only company able to offer you power modules of 1.5, 3, 4.5 and 6 kVA, in tower, rack and system versions, which are easily combined to ensure the ideal configuration for your present and future power supply requirements.

### Total protection

- **MODULYS**® is a modular UPS. The number of Mod-Power and Mod-Battery units can easily be increased to provide redundant operation, from N + 1 to N + X. In this way, total availability of the system is achieved, even if one or more modules are inoperative.

### Continuous protection

- The **MODULYS**® has "Hot swap" power and back-up modules which can be replaced or inserted while the system is in operation. In this way, true continuity of power supplied to the load is achieved, without any interruption of service.

### Organisation of your future needs

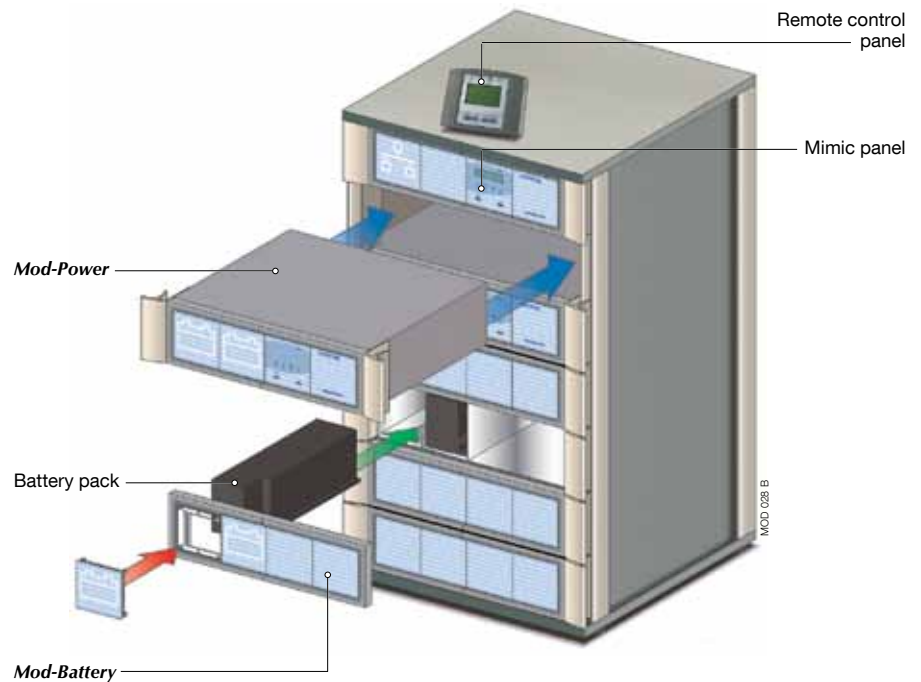
- The modular design of **MODULYS**® allows the number of modules to be increased and therefore, the power and back-up time of your UPS to grow. In this way you can easily cope with future situations which you are not able to predict today.

### Working space

- **MODULYS**® is the most compact UPS in its category. Whether in stand alone version or one of the many system configurations, the installation takes up very little of your working area.

### "No Single Point of Failure" solutions

- Each power module has its own integrated controller and an automatic bypass. In the system version, this design provides an additional guarantee since the load will be powered even if one of the modules is not working.

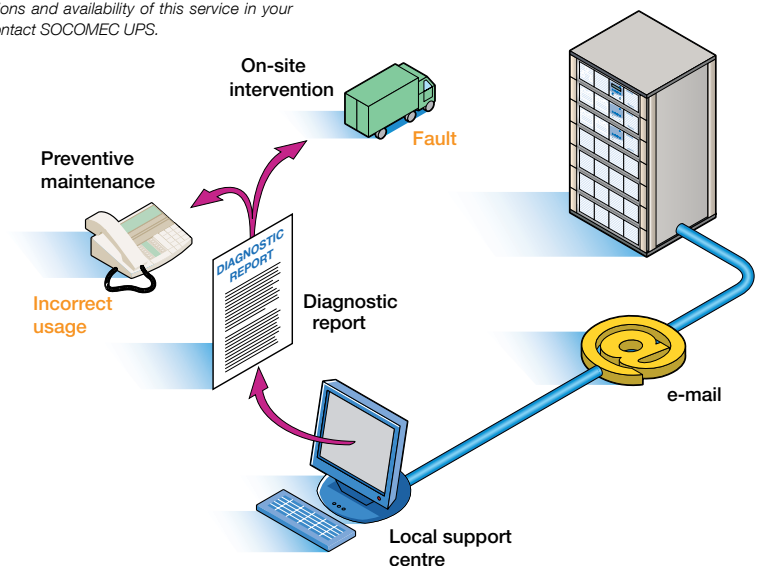


## Monitoring via the Internet

- **T.SERVICE**. This service plays a strategic role in the availability of your power supply. With **MODULYS** SOCOMEC UPS leads the way by providing an innovative high level service, close to the user and based on the most up-to-date Internet technology.
- Thanks to the **T.SERVICE**<sup>(1)</sup>, the UPS can not only run its own diagnostics, but also sends information to prevent possible problems to the Local Support Centre. Loss of redundancy, information predicting a battery fault, all this information and more will be analysed rapidly, enabling you to benefit from a fast, effective service. For example, a 'hot-swap' of a faulty module can be performed, before the user has even detected an operating fault!
- The combination of the simplicity of managing and maintenance of the **MODULYS**, and the **T.SERVICE** enables you to focus your energies on your business and not on managing your UPS.

- **MODULYS**® EB is standardly equipped with **T.SERVICE**. Any operating anomalies are signalled in real time via e-mail. The local service centre can respond rapidly and efficiently.

(1) For the conditions and availability of this service in your area, please contact SOCOMEC UPS.



## System adapted to your use

- **POWER SHARE**

This is a standard socket dedicated to non-critical loads. It is able to disconnect its load when a preset condition (relative to the remaining back-up time), occurs, to save battery back-up time for critical applications.

- **ECO MODE**

This operating mode has been designed to reduce inverter power consumption by going to stand by.

- **Frequency converter**

This makes it possible to have a 50 Hz input and a 60 Hz output, or vice versa.

- **Earthing arrangements**

**MODULYS®** is compatible with IT, TT and TN neutral arrangements.

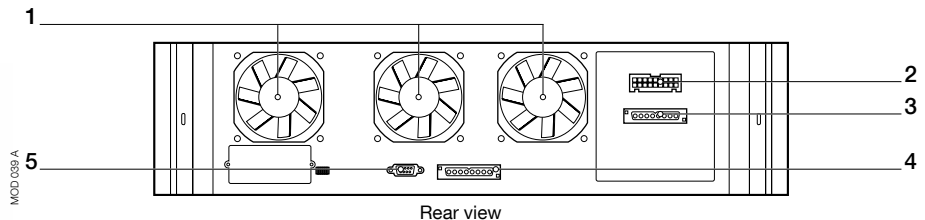
- **NET VISION**



This interface allows the UPS to be monitored, programmed and controlled, either via the means of a simple Web browser or by using an NMS (Network Management Station) via the SNMP. **NET VISION** allows the shutdown of remote server and client workstations connected to the computer network.

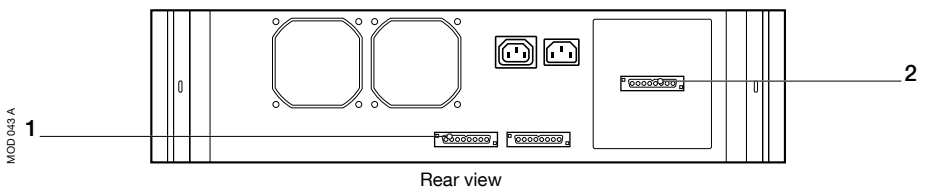
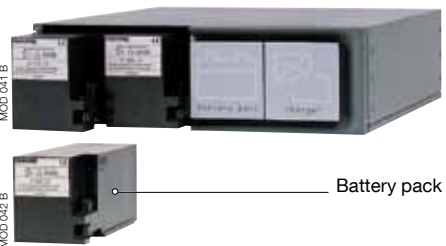
## Plug-in\* batteries and modules

- **Mod-Power**



1. Fans (number of fans depending on VA)
2. Parallel bus plug-in connection
3. INPUT/OUTPUT plug-in connection
4. Battery plug-in connection
5. DIP switch for configuration

- **Mod-Battery**



1. Battery plug-in connection
2. AC Supply for internal charger (plug-in)

\* Connectable

## An adaptable system

Mod-EB	VA	Typical back-up		Expandable time <sup>(1)</sup>	
		standard	max.	power	up to back-up time
<b>1290</b>	9000	8	100	18000	30
<b>1212 six</b>	12000	8	65	24000	23

(1) Back-up time at 75% of the load.

## Standard equipment

- Separate bypass input.
- Two slots for communication boards.
- RS 232/485 serial port.
- **NET VISION** interface for the LAN Ethernet network.
- 4 dry contacts relay card.
- Remote monitoring and control kit.

## Accessories

- Temperature sensor.

## Communication options

- Dry contacts relay card.
- Advanced communication card.
- **UNI VISION PRO** software.

## Range

**Mod-EB** expandable from 9 to 24 kVA



Model	<b>Mod-EB 1290</b>	<b>Mod-EB 1212 six</b>
Mod-Power	2 x 4500 VA	2 x 6000 VA
Battery pack	6	8

## Technical Data

### Mod-Power

MODULE UNIT POWER  
INPUT

4500 VA/3150 W

6000 VA/4200 W

Nominal input voltage	230 V (1 ph + N) or 400 V (3 ph + N)
Input voltage tolerance	± 20% (up to - 30% at 70% nominal load)
Frequency	50/60 Hz ± 10%
Power factor / THDI	> 0,99/6%

### OUTPUT

Output voltage	230 V (1 ph + N) ± 3% (can be set 208/220/240 V)
Output frequency	50 Hz - 60 Hz ± 2% (±0.1% autonomous frequency)
Automatic bypass	Voltage selected ± 15% - frequency selected ± 2%
Overload (mains mode)	(110% for one minute) (130% for 10 seconds) (200% for 5 cycles)
Global efficiency	up to 91% in on line mode 97% in <b>ECO MODE</b>
Admissible crest factor	3:1

### ENVIRONMENT

Operating ambient temperature	0 °C to + 40 °C (15 °C to 25 °C for best battery life)
Output frequency	50 Hz - 60 Hz ± 2% (±0.1% autonomous frequency)
Relative humidity	0% - 90% without condensation
Maximum altitude (above sea level)	1000 m without de-rating (maximum 3000 m)

### Mod-System

Dimensions W x D x H (mm) <b>Mod-EB 12XX</b>	550 x 625 x 1824 - 12 slots
Noise level (ISO 3746)	< 60 dB at 1 m
Heat dissipation (W) at 100% load	2080
Communication	RS 232/485 serial connection - Signal contacts
Connections: input/output/power share	Terminals

### STANDARDS

Technology	IEC 62040-3 VFI (Voltage Frequency Independent) On line double conversion
Safety	(EN) IEC 62040-1-1
Performance and topology	(EN) IEC 62040-3
EMC standard	EN 50091-2/IEC 62040-2
Product certification	CE
IP rating	IP 20 (compliant with IEC 60529)