CATALOGUE

Power protection solutions for IT and Networking equipments

2013

CRITICAL POWER

socomec
Innovative Power Solutions

Choose the right power protection and power

The UPS technologies

VFD "offline" - *"Voltage and Frequency Dependent".*
Utilities are normally powered by the mains supply. In the event of power loss the load is automatically switched over to a built-in battery to keep it supplied without interruptions.

VI "line interactive", step wave
VI "line interactive", sine wave
Voltage Independent".
The load is supplied by the mains power supply and protected against under and over voltages by an AVR (Automatic Voltage Regulator) voltage stabilizer. If the mains power is lost, the load is istantaneously powered by the battery.

VFI "online double conversion"
"Voltage and Frequency Independent".
It's the only UPS working-mode that assures total load protection against all possible mains quality problems. The power is converted twice (AC to DC through a rectifier then DC to AC through an inverter) to provide high quality voltage, stable frequency and protection against power grid

UPS single-phase range

(VA) 750 1000 1500 2000 3000 5000

NETYS PL 600-800 VA
User-friendly and compact protection for the small office & home office, ideal for multimedia PC, professional workstations and gaming consoles.

NETYS PE 600-2000 VA
General purpose and cost-effective protection suite for front office and business: computers, workstations, wireless networks, point-of-sale equipment.

NETYS PR *Mini Tower* 1000-2000 VA
Professional protection for office and SME: high performance computer systems, CAD, routers/modems, external storage devices and other sensitive electronic equipment.

Ultra compact 1U UPS, ideal for high density rack cabinet to leave more space for other critical equipment such as servers, disk arrays, networking peripherals.

NETYS PR *Rack 1U* 1000-1500 VA

NETYS PR *Rack/Tower* 1700-3300 VA
High-end professional rack/tower convertible models for applications in network closets such as small servers, storage devices, hubs, routers, IP phone gear.

NETYS RT-M 1.1-3 kVA
Reliable rack/tower convertible models for total protection of marine applications operating in harsh environments.

Management software

LOCAL VIEW
UPS monitoring and shutdown point-to-point solution for Windows® operating system.

NET VISION
WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems.

ITYS ES 1-3 kVA

Protection of control devices and electrical lines in MV/LV substations

Designed to supply emergency l
tertiary sector, hotels, hospitals,

A complete modular system. Scalable and redundant protection and back-up time for mission-critical applications such as banks, healthcare and computer rooms.

PC and peripherals, workstations, cash registers, points of sales | IT equipment | Networking devices, control systems, VoIP and cabling systems | Switching, storage, virtualized server

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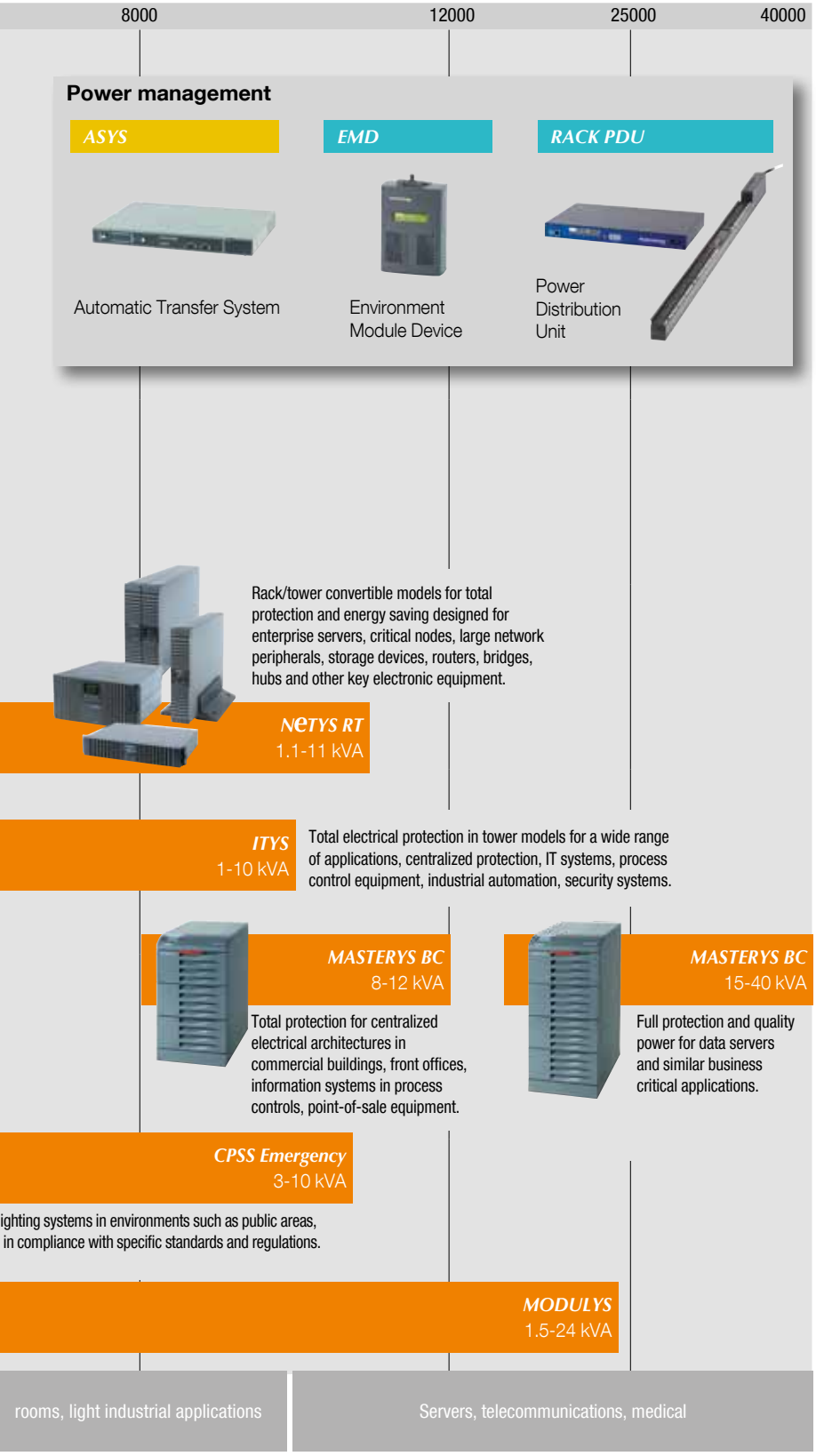
management solution

disturbances. If the mains power is lost, the load is powered exclusively by the battery. The internal bypass supplies the utilities in case of inverter output voltage anomalies.



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SOCOMEC: an independent manufacturer

the benefit of a specialist

Founded in 1922, SOCOMEC is an industrial group with a workforce of 3200 people. Our core business - the availability, control and safety of low voltage electrical networks with increased focus on our customers' power performance.

CORPO 308 A

The culture of independence

The SOCOMEC Group's independence ensures control over its own decision-making, respecting the values advocated by its own family shareholders and shared by its employees.

With around 30 subsidiaries located on all five continents, SOCOMEC pursues international development by targeting industrial and service applications where the quality of its expertise makes all the difference.

The spirit of innovation

As undisputed specialists in UPS systems, mains supply changeover, power conversion and measurement, SOCOMEC dedicates nearly 10% of its turnover to R&D. As a result the Group can achieve its ambition of always being one technological step ahead.

The vision of a specialist

As a manufacturer with complete control over its technological processes, SOCOMEC is quite unlike the more general providers. The Group is constantly improving its fields of expertise in order to offer its clients increasingly customized, appropriate solutions.

A flexible manufacturing structure

Backed by two European centres of excellence (France and Italy), the Group also benefits from competitive production sites such as Tunisia and locations in the major emerging markets (India and China).

These sites have all implemented a system of continuous improvement based on Lean Management principles, and are therefore in a position to provide high levels of quality, and meet the deadlines and cost requirements expected by customers.

The focus on service

Our manufacturer's expertise naturally extends to a complete range of services designed to facilitate the research, implementation and operation of our solutions. Our service teams have built their reputation on reassuring guidance, flexible skills and reactivity.

Responsible growth

As a Group which is open to all cultures and firmly committed to human values, SOCOMEC promotes employee initiative and commitment. Working relationships are based on the idea of partnerships and respect for shared ethics. Through the company's commitment to achieving harmonious, lasting development, SOCOMEC fully embraces its responsibilities not only towards its shareholders, employees, customers and partners, but also towards society as a whole and its environment.

SOCOMEC has been a signatory to the Global Compact since 2003.

ENERGY SPECIALIST SINCE 1922

THE GLOBAL COMPACT WE SUPPORT

For a high quality power supply

innovative power solutions

The SOCOMEC UPS product range covers all needs for a high quality, faultless electrical power supply.
Our UPS, as well as our secure power supplies, static transfer systems, harmonic equalizers, rectifiers and DC/AC and AC/DC converters, comprise the most complete ranges in the world and cover a very wide range of applications for every sector of the market.

A key requirement

High quality energy supply at any moment is vital in many fields such as IT, industry and infrastructure applications. It is even mission-critical for many medical applications. SOCOMEC UPS has over 40 years of experience at your disposal.

Product solutions that meet requirements

Underpinned by significant R&D resources, our product offer continually evolves as a consequence of our contact with customers.
To ensure the highest availability, we provide the latest UPS technology combined either with traditional batteries or with other innovative energy storage systems.
Our solutions have the approval of some of the most stringently demanding users: Telecom companies worldwide, Ministries of Defence, nuclear industry operators...

Recognised expertise

Prestigious accolades have been presented in recognition of the company's ability to meet the needs and product demands of its customers. Among others:

- customer Service Excellence (2004),
- product Innovation (2006),
- best Practice Award for "European Energy & Power Systems Product Line Strategy" (2009),
- European UPS new product innovation award (2011).

Always focused on customer needs

Our sales and after-sales network means we are always there for you. Our partner-customers recognise the quality of our products, availability and flexibility in meeting requirements and commitment.

Continuing innovation

The facts speak for themselves:

- first French manufacturer to offer static power supplies (1968),
- first UPS designed with PWM technology (1980),
- first UPS range in the world using IGBT technology (1990),
- first modular, scalable and redundant UPS system (2000),
- first to integrate hybrid components (2001),
- first 200 kVA UPS with IGBT rectifier (2003),
- new battery charging design (2004),
- dynamic energy storage system (flywheel) (2006),
- first UPS with 96% efficiency in true online double conversion mode (2007),
- most compact STS 19" rack hot-swappable (2009),
- most compact 900 kVA UPS (2010),
- first complete UPS range (10-2400 kVA) with 3-level technology, 96% efficiency and power factor 1 (2012).

THE GLOBAL COMPACT WE SUPPORT

SOCOMEC joined the United Nations **"Global Compact"** in 2003 to tackle the social and environmental challenge of globalization.

AFAQ ISO 14001

ISO 14001 This international standard recognizes SOCOMEC's determination on pursuing its commitment to preserve the environment.

the green grid™ member

The Green Grid™ is an organization committed to improving the resource efficiency of data centres and business computing ecosystems.

CODE OF CONDUCT

As Endorser on the **European Code of Conduct** for Data Centres, SOCOMEC UPS is committed to implementing energy efficient solutions in new data centres whilst respecting the life cycle, cost-effectiveness and the performance availability of the system.

NETYS PL

600 and 800 VA

a multi-socket UPS for easier connections

new

NETYS PL
600 VA

NETYS PL
800 VA

GAMME 255 A

The solution for

- PC: LCD or CRT monitors, scanners, printers, etc.
- Cash registers
- Interactive terminals

Technology

- VFD “offline”

An innovative solution and superior design

- Compact and practical pluggable power protection integrating a larger number of sockets adapted to computer and IT peripherals in small office and home office environments, facilitating connection and tidier cabling.
- Modern design suitable for positioning over/under the desk or floor installations.
- Complementary USB port on the top for recharging mobile devices (e.g. phones, MP3, etc.).

Adapted protection to meet all your needs

- 6 output sockets (British, French or German/ Italian standards) for easy distribution directly to your applications:
  - 4 sockets protected against power cuts and overvoltages, aimed at your most sensitive applications (professional desk top systems, workstation and monitors). The back-up time (up to 30 minutes) enables standard PC tasks and configuration to be saved.
  - 2 sockets protected against overvoltage alone for use with less critical applications and high absorption consumers (e.g. laser printers).

Easy to use

- Operating mode indicated by means of the smart LED indicator lights.
- Easy battery maintenance and replacement.
- Integrated mains input cable on the side, allowing all six sockets to be used.

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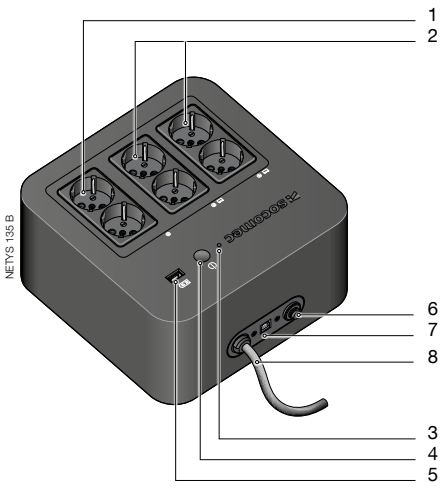
Connections



1. Filtered output sockets
2. Inverter output sockets
3. LED
4. On/Off button
5. USB port to charge mobile devices
6. Fuse
7. USB serial port
8. Mains input cable

Technical data

	NeTYS PL	
Sn	600 VA	800 VA
Pn	360 W	480 W
Power (surge)	1200 VA	
Input / output	1/1	
INPUT		
Rated voltage	230 V	
Voltage tolerance	180 ÷ 270 V	
Rated frequency	50/60 Hz with automatic selection	
Mains connection	Cable with plug	
OUTPUT		
Rated voltage	230 V ±10%	
Rated frequency	50/60 Hz ±1%	
Wave form	Step wave	
Protection	Overload, significant discharge and short circuit	
Sockets	4 sockets for UPS and surge protection, 2 sockets for surge protection	
Socket standard	British, French or German/Italian	
BATTERIES		
Type	Sealed lead-acid maintenance free - expected life 3/5 years	
Back-up time (1)	15 min	20 min
COMMUNICATION		
Interfaces	USB	
Local communication software	Local View	
UPS CABINET		
Dimensions W x D x H	220 x 220 x 123 mm	
Weight	3.6 kg	4.1 kg
Colour	Black	White
STANDARDS		
Safety	EN 62040-1	
EMC	EN 62040-2	
Product certification	CE	

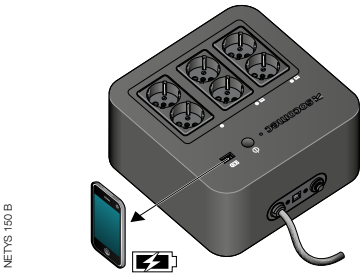
(1) PC + 17" LCD monitor.

Socket types

French socket	German/Italian socket	British socket

Standard electrical features

- USB port to charge mobile devices



Standard communication features

- LOCAL VIEW: ideal UPS monitoring and shutdown point-to-point solution for Windows®, Linux and Mac OS X® operating systems.

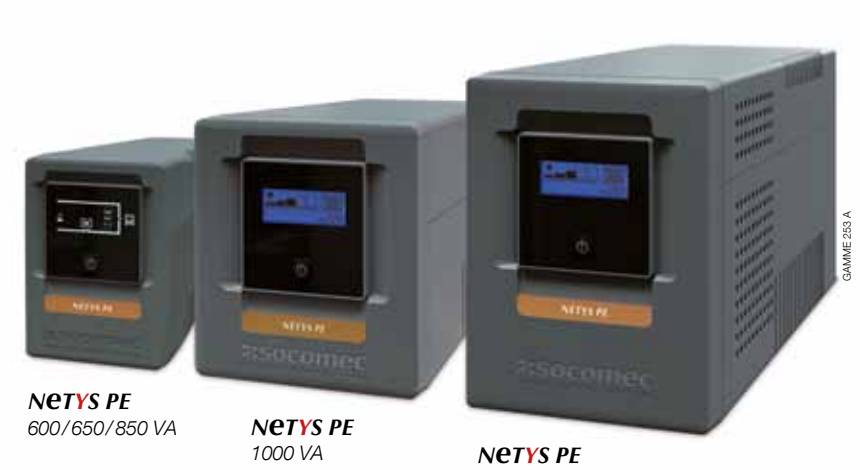
NETYS PE

from 600 to 2000 VA

practical and cost-effective UPS

Single-phase UPS

new



NETYS PE
600/650/850 VA

NETYS PE
1000 VA

NETYS PE
1500/2000 VA

The solution for

- CAD, graphic workstations
- Multimedia workstations and peripherals
- LCD screens and monitors
- POS (Points Of Sales)

Technology

- VI “line interactive” with AVR, step wave

Certifications

N876

Ideal and cost-effective protection for SOHO or POS applications

- Adapted to protect IT applications in home, office and retail environments.
- A complete range of six models to adapt the power to the equipment’s consumption or to required back-up time.

Easy to use

- Control panel with graphical icons LCD / LEDs allowing the operating mode to be easily monitored.

A solution for network power cuts and voltage fluctuations

- The integrated AVR function (Automatic Voltage Regulation) stabilizes the output voltage and avoids the switching to Battery Mode operation, therefore saving the battery to support critical power cut events.

Simplified connection

- Several IEC 320 sockets (IT standard) simplify the connectivity to computer and IT peripherals.

Protection for your data line

- Integrated NTP protection for LAN/ADSL connection against the risk of data line overvoltage.

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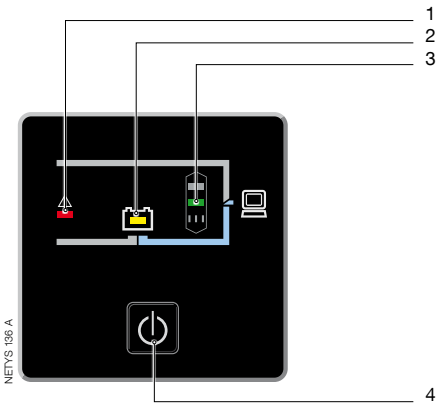
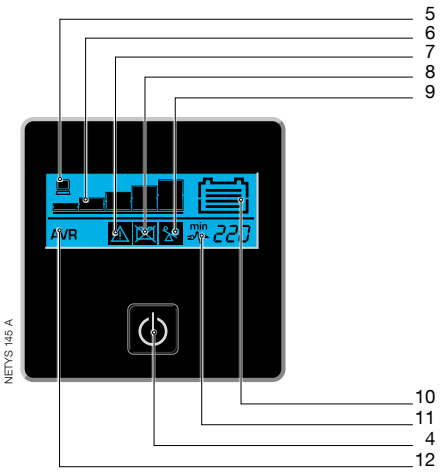
Control panel



600 / 650 / 850 VA

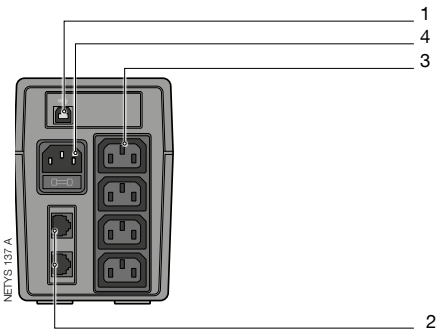


1000 / 1500 / 2000 VA

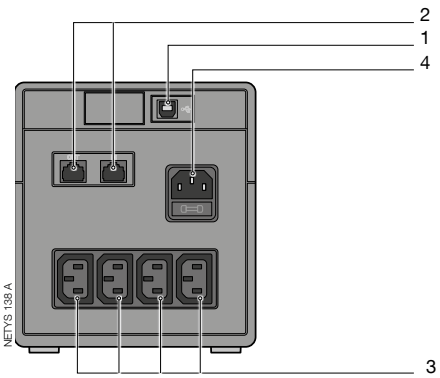
1. Alarm
2. Operation with battery
3. Normal operation
4. On / Off
5. Load present
6. Load level (5 steps)

7. General Alarm
8. Battery fault / Replace the battery
9. Overload
10. Battery capacity
11. Normal mode / Battery mode (flashing)
12. Automatic Voltage / Regulation active

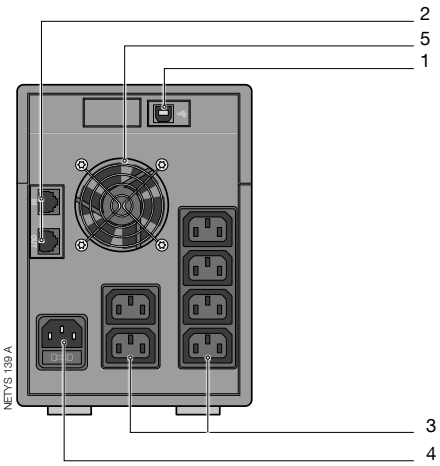
Connections



600 / 650 / 850 VA



1000 VA



1500 / 2000 VA

1. USB serial port
2. NTP data line suppressor
3. UPS output sockets
4. Input socket and fuse
5. Fan / air vents

Technical data

	NETYS PE					
Sn	600 VA	650 VA	850 VA	1000 VA	1500 VA	2000 VA
Pn	360 W	360 W	480 W	600 W	900 W	1200 W
Input/output	1/1					
INPUT						
Rated voltage	230 V					
Voltage tolerance	170 - 280 V					
Rated frequency	50/60 Hz with automatic selection					
Mains connection	IEC320 socket					
OUTPUT						
Automatic Voltage Regulation (AVR)	•	•	•	•	•	•
Rated voltage	230 V ±10%					
Rated frequency	50/60 Hz ±1%					
Wave form	Step wave					
Protection	Overload, significant discharge and short circuit					
Connections	4 x IEC 320 (C13)(1)				6 x IEC 320 (C13)(1)	
BATTERIES						
Type	Sealed lead-acid maintenance free - expected life 3/5 years					
Back-up time (2)	15 min	15 min	20 min	45 min	55 min	60 min
COMMUNICATION						
Interfaces	-	USB				
Local communication software	-	Local View				
Data Line protection	-	NTP data line suppressor				
UPS CABINET						
Dimensions W x D x H	100 x 290 x 145 mm			145 x 345 x 165 mm	145 x 390 x 205 mm	
Weight	5.0 kg	5.2 kg	6.0 kg	9.7 kg	11.2 kg	12 kg
STANDARDS						
Safety	EN 62040-1, AS 62040-1					
EMC	EN 62040-2, AS 62040-2					
Product certification	CE, C-Tick (N876)					

(1) Australian standard sockets on Netys PE models specific for Australia.
(2) PC + 17" LCD monitor.

Standard communication features

- LOCAL VIEW: ideal UPS monitoring and shutdown point-to-point solution for Windows®, Linux and Mac OS X® operating systems.

NETYS PR

from 1000 to 2000 VA - Mini Tower

intelligent and reliable protection

new

NETYS PR
1000 VA

NETYS PR
1500/2000 VA

The solution for

- Professional and IT equipment
- Servers and networking devices
- CAD / graphic workstations with monitors and peripherals
- Control systems

Technology

- VI “line interactive” with AVR, sine wave

Certifications

N876

Professional line interactive UPS

- Ideal solution for protecting small servers and high performance CAD or graphic workstations.
- Assures service continuity to critical applications.
- Designed for professional applications: the sinevawe inverter technology assures full compatibility with any kind of load and power supply.
- Minitower case to easily fit close to the IT load to be supplied and protected.

A solution for network power cuts and voltage fluctuations

- The integrated AVR function (Automatic Voltage Regulation) stabilizes the output voltage and avoids the switching to Battery Mode operation, therefore saving the battery to support critical power cut events.

Easy to use

- Control panel with graphical icons LCD allowing the operating mode to be easily monitored.

Simplified connection

- Several IEC 320 sockets (IT standard) simplify the connectivity to computer and IT peripherals.

Protection for your data line

- Integrated NTP protection for LAN/ADSL connection against the risk of data line overvoltage.

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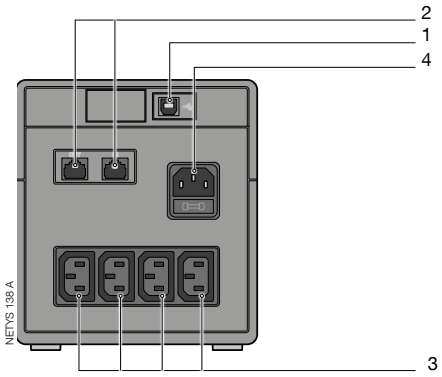
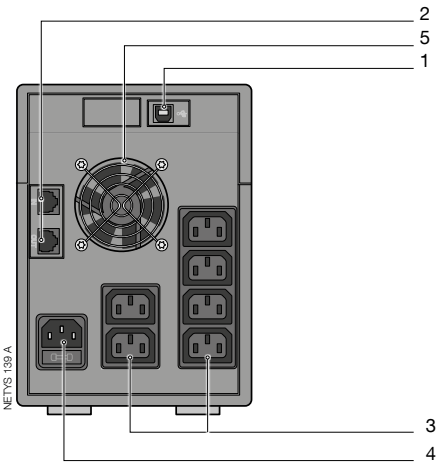
Connections



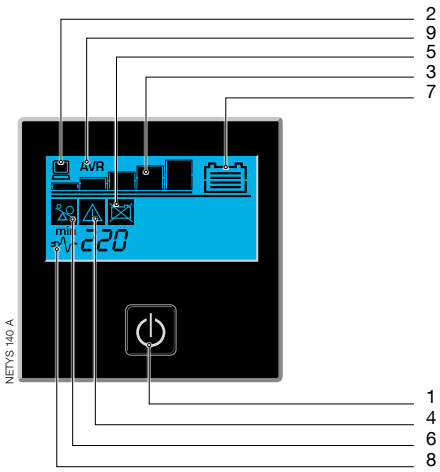
1000 VA



1500 / 2000 VA

1. USB serial port
2. NTP data line suppressor
3. UPS output sockets
4. Input socket and fuse
5. Fan / air vents

Control panel



1. On / Off
2. Load present
3. Load level (5 steps)
4. General Alarm
5. Battery fault / Replace the battery
6. Overload
7. Battery capacity
8. Normal mode / Battery mode (flashing)
9. Automatic Voltage / Regulation active

Technical data

	NeTYS PR Mini Tower		
Sn	1000 VA	1500 VA	2000 VA
Pn	700 W	1050 W	1400 W
Input/output	1/1		
INPUT			
Rated voltage	230 V		
Voltage tolerance	170 - 280 V		
Rated frequency	50/60 Hz with automatic selection		
Mains connection	IEC320 socket		
OUTPUT			
Automatic Voltage Regulation (AVR)	•	•	•
Rated voltage	230 V ±10%		
Rated frequency	50/60 Hz ±1%		
Wave form	Sine wave		
Protection	Overload, significant discharge and short circuit		
Connections	4 x IEC 320 (C13)	6 x IEC 320 (C13)	
BATTERIES			
Type	Sealed lead-acid maintenance free - expected life 3/5 years		
Back-up time (1)	45 min	55 min	60 min
COMMUNICATION			
Interfaces	USB		
Local communication software	Local View		
Data Line protection	NTP data line suppressor		
UPS CABINET			
Dimensions W x D x H	145 x 345 x 165 mm	145 x 390 x 205 mm	
Weight	9.2 kg	12.3 kg	13.2 kg
STANDARDS			
Safety	EN 62040-1, AS 62040-1		
EMC	EN 62040-2, AS 62040-2		
Product certification	CE, C-Tick (N876)		

(1) PC + 17" LCD monitor.

Standard communication features

- LOCAL VIEW: ideal UPS monitoring and shutdown point-to-point solution for Windows®, Linux and Mac OS X® operating systems.

NETYS PR

from 1700 to 3300 VA - Rack/Tower

versatile, convertible high performance UPS

Single-phase UPS

new

The solution for

- Professional and IT equipment
- Servers and networking devices
- CAD / graphic workstations with monitors and peripherals
- Control systems

Technology

- VI “line interactive” with AVR, sine wave

Certifications

N876

A secure and professional supply continuity

- Ideal solution for protecting small servers, networking devices and peripherals.
- Assures service continuity to critical applications.
- Designed for professional applications: the sinevawe inverter technology assures full compatibility with any kind of load and power supply.

Tailored to IT networking

- The space and time-saving tower/rack conversion option means it can be installed easily either in tower mode or inside standard 19” rack cabinets depending on the user’s needs.

Simple to install

- No configuration needed on first startup.
- Compact footprint (2U/89 mm) for installation in rack cabinets.
- Attractive design for visible installation in offices.
- USB port and HID protocol as standard for direct interfacing with Windows systems®, without the need for additional specialist software.

Protection for your data line

- Integrated NTP protection for LAN/ADSL connection against the risk of data line overvoltage.

Meets practical needs

- Optional battery extension modules (EBM) to meet all back-up time requirements, even after installation.
- Clear and uncluttered LCD interface, with buzzers that immediately indicate the operating status of the UPS, even for less specialist users.
- Simplified maintenance and Battery ‘hot swap’, without closing down other applications.

Easy to use and to integrate

- Wide range of communication protocols available in options (including JBUS, TCP/IP and SNMP) for integration into LAN networks or building management systems (BMS) · Easy connections to the applications (depending on power) via 8 or 8+1 IEC 320 (IT standard) sockets.
- Load segmentation function to prioritize loads and manage critical situations.
- EPO (Emergency Power Off) emergency stop.
- RS232 advanced connections for the management of the power supply and local/remote shutdown of applications.

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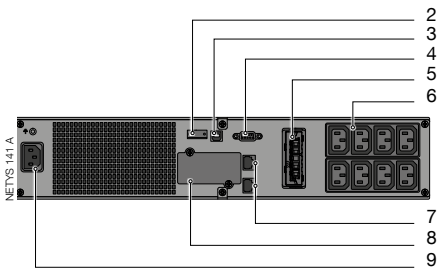
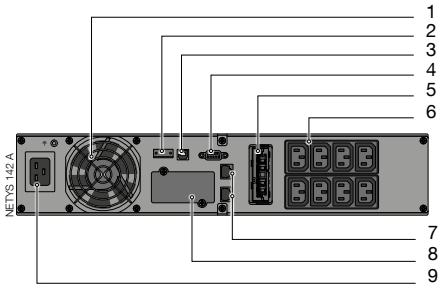
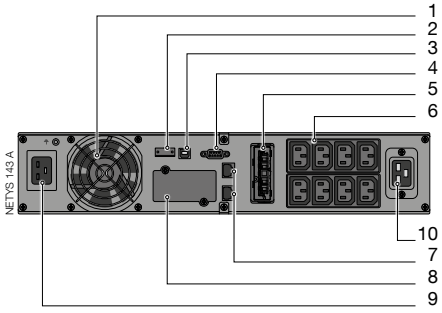
Connections



1700 VA



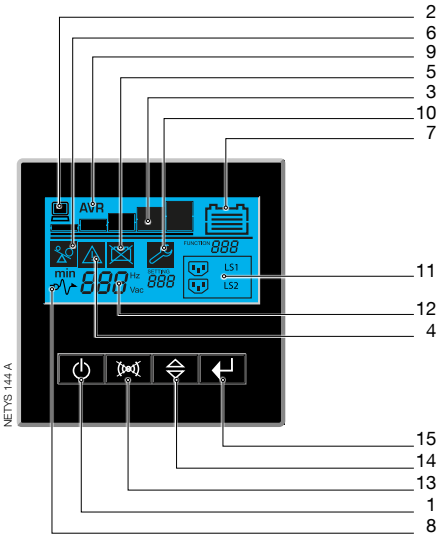
2200 VA



3300 VA

1. Fan / air vents
2. EPO Emergency Power Off
3. USB serial port
4. RS232 serial port
5. Connector for external battery extension
6. UPS output sockets (2 segments)
7. NTP protections (RJ45)
8. Slot for optional communication boards
9. Input socket
10. UPS full power output socket

Control panel



1. On / Off
2. Load present
3. Load level (5 steps)
4. General Alarm
5. Battery fault / Replace the battery
6. Overload
7. Battery capacity
8. Normal mode / Battery mode (flashing)
9. Automatic Voltage / Regulation active
10. Configuration
11. Programmable outlets
12. Input value
13. UPS test / Buzzer off
14. Navigator button
15. Enter

Technical data

	NETYS PR Rack/Tower		
Sn	1700 VA	2200 VA	3300 VA
Pn	1350 W	1800 W	2700 W
Input/output	1/1		
INPUT			
Rated voltage	230 V		
Voltage tolerance	161 V ±4% (selecting wide mode) -276 V ±4%		
Rated frequency	50/60 Hz with automatic selection		
Mains connection	IEC320-C14 (10 A)	IEC320-C20 (16 A)	
OUTPUT			
Automatic Voltage Regulation (AVR)	The AVR increases (boost 1) the output voltage by 14% when the input voltage drops below 90% of the nominal value. The AVR decreases (bucks) the output voltage by 12% when the input voltage rises above 106% of the nominal value.		
Rated voltage	230 V ±5%		
Rated frequency	50/60 Hz ±0.1%		
Wave form	Sine wave		
Protection	Normal Mode: overload (110% for 3 minutes) Battery Mode: overload (110% for 30 seconds); shortcircuit protected		
Connections	8 (10 A) x IEC 320		8 (10 A) x IEC 320 1 (16 A) x IEC 320
BATTERIES			
Type	Sealed lead-acid maintenance free - expected life 3/5 years		
Back-up time (1)	6 min	8 min	6 min
COMMUNICATION			
Interfaces	RS232 - USB		
Ethernet adapter	NET VISION (TCP/IP & SNMP) optional card		
Local communication software	Local View		
Data line protection	NTP data line suppressor: RJ45 10 Base T		
UPS CABINET			
Dimensions W x D x H	440 x 436 x 87 mm	440 x 608 x 87 mm	
Weight	18 kg	28.2 kg	31.5 kg
STANDARDS			
Safety	EN 62040-1, AS 62040-1		
EMC	EN 62040-2, AS 62040-2		
Product certification	CE, C-Tick (N876)		

(1) @ 75% of load.

Standard communication features

- LOCAL VIEW: ideal UPS monitoring and shutdown point-to-point solution for Windows®, Linux and Mac OS X® operating systems.
- HID: UPS management based on Windows® and Mac OS X® embedded service - USB interface.
- MODBUS/JBUS RTU (RS232).

Communication options

- NET VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems.
- Dry-contact interface.
- Rails

Battery extensions

NETYS PR	+ 1 (NPR-B1700-RT)	+ 2 (NPR-B1700-RT)
1700 VA	22 min	42 min

NETYS PR	+ 1 (NPR-B3300-RT)	+ 2 (NPR-B3300-RT)
2200 VA	37 min	72 min
3300 VA	22 min	43 min

NETYS PR

from 1000 to 1500 VA - Rack 1U
high density power slim UPS

Single-phase UPS

The solution for

- Professional and IT equipment
- Servers and networking devices
- CAD / graphic workstations with monitors and peripherals
- Control systems

Technology

- VI “line interactive” with AVR, sine wave

Certifications

N876

A professional UPS

- Designed for professional environments, protection against power cuts and over voltage is ensured by Line Interactive technology with Automatic Voltage Regulation (AVR).

An installation adapted to the networking environment

- NETYS PR rack provides high power density (1U - 45 mm) which conserves valuable space in the rack for other equipment.
- Can be easily installed in 19” and 23” Rack cabinets, depending on the user’s needs. The UPS is provided with rails and mounting accessories.

Adapted connections

- Easy connections to the applications via 4 IEC 320 (IT standard) sockets.

Data line protection

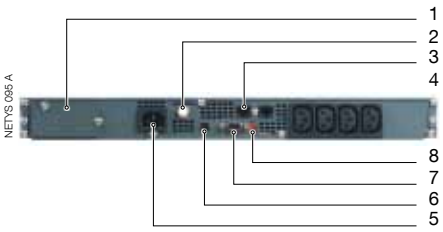
- With RJ45 connector.

Communication with the computer system

- RS232 or USB advanced connections for the management of the power supply and local / remote shutdown of applications.
- Advanced diagnostics and remote control via various protocols and user environments: JBUS, HID, SNMP, TCP / IP.

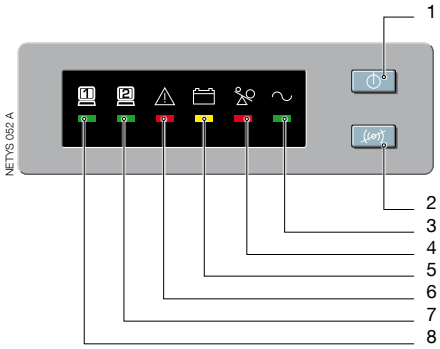
socomec Innovative Power Solutions

Connections



1. Slot for optional communication boards
2. Input protection
3. Network Transient Protector
4. Output sockets (IEC 320 10 A)
5. Main input socket (IEC 320)
6. USB Port
7. RS232 serial port
8. DIP switches

Control panel



1. ON-OFF button
2. Test / Alarm reset button
3. Power ON
4. Overload
5. Battery mode
6. Service
7. Load segment 2
8. Load segment 1

Battery Hot-swap

- Battery can be hot-swapped without having to shut down the connected equipment.
- Battery can be replaced from the front without removing and disconnecting the UPS.
- Battery check system and replacement indicator.

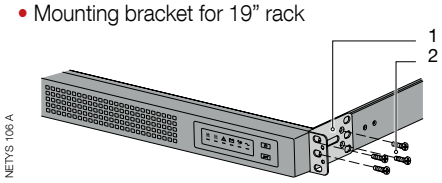
Technical data

	NETYS PR Rack 1U	
Sn	1000 VA	1500 VA
Pn	670 W	1000 W
Input/output	1/1	
INPUT		
Rated voltage	230 V (default), 220 V, 230 V, 240 V selectable	
Rated frequency	50/60 Hz auto-sensing	
OUTPUT		
Rated voltage	230 V	
Rated frequency	50/60 Hz	
Sockets	4 x IEC 320 (10 A)	
Data line protection	NTP data line suppressor: RJ45 10 Base T	
BATTERIES		
Type	sealed lead-acid maintenance free - expected life 3/5 years	
Back-up time (1)	12 min	
COMMUNICATION		
Interfaces	RS232 - USB	
Local communication software	Local View	
UPS CABINET		
Dimensions W x D x H	440 x 578 x 44.5 mm	
Weight	21 kg	23 kg
STANDARDS		
Safety	EN 62040-1, AS 62040-1	
EMC	EN 62040-2, AS 62040-2	
Product certification	CE, C-Tick (N876)	

(1) PC + 15" LCD monitor.

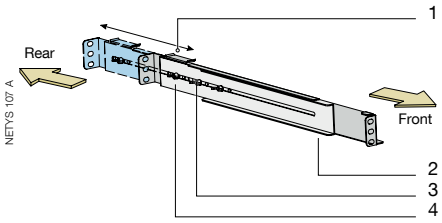
Included

- Mounting bracket for 19" rack



1. Mounting bracket
2. M3 x 6 bracket screws

- Adjustable rails



1. Rear Hold-Down Bracket
2. Rail assembly
3. Assembly Wing Nuts
4. Wing nut for rear Hold-down bracket

Standard communication features

- LOCAL VIEW: ideal UPS monitoring and shutdown point-to-point solution for Windows®, Linux and Mac OS X® operating systems.
- HID: UPS management based on Windows® and Mac OS X® embedded service - USB interface.
- MODBUS/JBUS RTU (RS232).

Communication options

- NET VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems.
- Dry-contact interface.

NETYS RT

from 1100 to 11000 VA

complete solution for IT infrastructures

new

From 5 to 11 kVA

Simple to install

- IEC input and output connections (1100-3000 VA) or terminal input and output connections with built-in magnetothermal input switch (5000-11000 VA).
- Compact footprint for installation in rack cabinets.
- Attractive design.

Easy to use

- No configuration necessary on first startup.
- Wide range of communication protocols for integration into LAN networks or Building Management Systems (BMS).
- Clear LED interface with buzzers that immediately indicate the operating status of the UPS, even for less specialist users (1100-3000 VA).
- LCD display with menu available in 6 languages (5000-11000 VA).

Meets practical needs

- Online double conversion technology with sinusoidal waveform, completely filters out all disturbances from / to the mains power supply and ensures maximum protection of the utility.
- Modular battery extension (EBM) to meet all back-up time requirements, even after installation.
- Possibility of 1+1 parallel redundant configuration to maximise the availability of critical utilities, even in the event of a module breakdown (5000-11000 VA).

The solution for

- Switching
- Storage
- Servers and networking devices
- VoIP communication systems
- Structured cabling systems
- Control systems
- Video surveillance systems

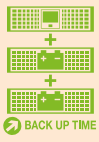
Technology

- VFI “online double conversion”

Certifications

N876 N876

Advantages



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Standard electrical features

- Built-in backfeed protection.
- Protection against atmospheric phenomena (NTP) for telephone / ADSL modems.
- RJ11 connection for Emergency Power Off (EPO).
- Connection for battery extension modules.
- Port for parallel operation (5000-11000 VA).

Electrical options

- 1+1 parallel module (5000-11000 VA).
- Manual bypass without interruption (5000-11000 VA).
- Battery extension modules.

Standard communication features

- LOCAL VIEW: ideal UPS monitoring and shutdown point-to-point solution for Windows®, Linux and Mac OS X® operating systems.
- HID: UPS management based on Windows® and Mac OS X® embedded service - USB interface (1100-3000 VA).
- MODBUS/JBUS RTU (RS232).
- RT-VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems (5000-11000 VA).

Communication options

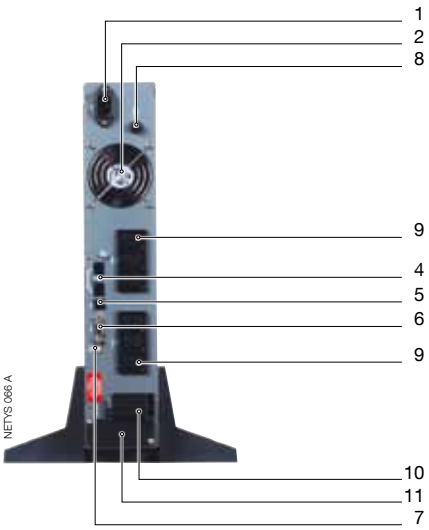
- RT-VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems (1100-3000 VA).
- Dry-contact interface.

Technical data

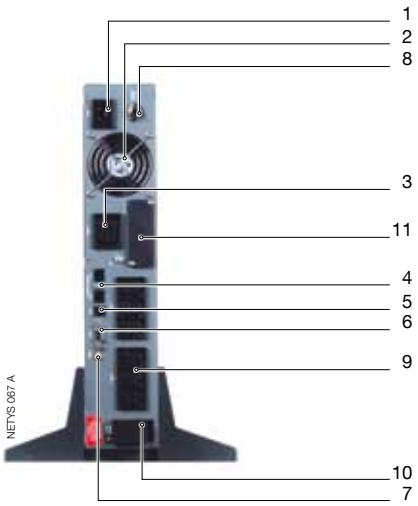
	NETYS RT							
Sn	1100 VA	1700 VA	2200 VA	3000 VA	5000 VA	7000 VA	9000 VA	11000 VA
Pn	800 W	1200 W	1600 W	2100 W	4500 W	5400 W	7200 W	9000 W
Architecture	online double conversion VFI with input PFC and automatic bypass							
Parallel redundant function	-	-	-	-	1+1	1+1	1+1	1+1
INPUT								
Voltage	230 V (1ph) 160~275 Vac; up to 130 Vac @70% load				230 V (1ph) 181~280 Vac up to 100 Vac @50% load			
Frequency	50/60 Hz +/-10% (Auto-Selectable)							
Power factor / THDi	>0.98 / <6%				>0.99 / <5%			
OUTPUT								
Voltage	230 V (1ph) selectable 200 / 208 / 220 / 240V - 50 or 60 Hz + /- 2 % (+/- 0.05 Hz in battery mode)							
Efficiency	up to 91% online mode				up to 92% online mode			
Overload capability	up to 105% continuously; 125% x 3 min; 150% x 30 sec				up to 105% continuously; 125% x 5 min; 150% x 30 sec			
Output connections	6 x IEC 320-C13 (10 A)	6 x IEC 320-C13 (10 A) + 1 x IEC 320-C20 (16 A)			terminals			
BATTERY								
Standard autonomy*	8	12	8	10	8	6	8	6
Voltage	24 Vdc	48 Vdc	48 Vdc	72 Vdc	192 Vdc	192 Vdc	240 Vdc	240 Vdc
Recharge time	< 6 hr to recover 90% capacity				< 6 hr to recover 90% capacity			
COMMUNICATION								
Mimic panel	LED				LCD 6 languages			
RS232 MODBUS protocol	•	•	•	•	•	•	•	•
USB HID protocol	•	•	•	•	-	-	-	-
WEB/SNMP (Ethernet RJ45 port)	option	option	option	option	•	•	•	•
COMM slot	•	•	•	•	•	•	•	•
Dry contacts card	option	option	option	option	option	option	option	option
EPO input (RJ11 port)	•	•	•	•	•	•	•	•
Modem/ADSL surge protection	•	•	•	•	-	-	-	-
Parallel port	-	-	-	-	•	•	•	•
STANDARDS								
Performance & topology	EN 62040-3 (VFI-SS-111)							
Safety /EMC	EN 62040-1 (TÜV-GS certified) EN 62040-2							
Product certifications	CE, TÜV-GS, C-Tick							
IP rating	IP20							
ENVIRONMENT								
Operating ambient temperature	from 0 °C to +40 °C (from 15 °C to 25 °C for best battery life)							
Storage temperature range	from -15 °C to +50 °C (from 15 °C to 25 °C for best battery life)							
Relative Humidity	0-90% non-condensing							
Noise level (ISO 3746)	< 45 dB			< 55 dB				
DIMENSIONS & WEIGHT								
UPS size std (W x D x H)	88.7x332x 440 mm	88.7x430x440 mm	88.7x430x440 mm	88.7x608x440 mm	177.4x670x440 mm	177.4x670x440 mm	261.2x623x440 mm	261.2x623x440 mm
UPS size RACK	2U	2U	2U	2U	2U+2U	2U+2U	3U+3U	3U+3U
UPS weight std	13 kg	21 kg	22 kg	31 kg	15.5+40 kg	16+40 kg	19.5+66 kg	20+66 kg
EBM module size (W x D x H)	88.7x332x 440 mm	88.7x430x440 mm	88.7x430x440 mm	88.7x608x440 mm	88.7x608x440 mm	88.7x608x440	130.6x623x440 mm	130.6x623x440 mm
EBM module RACK	2U	2U	2U	2U	2U	2U	3U	3U
EBM module weight	16 kg	29 kg	29 kg	43 kg	40 kg	40 kg	66 kg	66 kg

* @ 75% of nominal load.

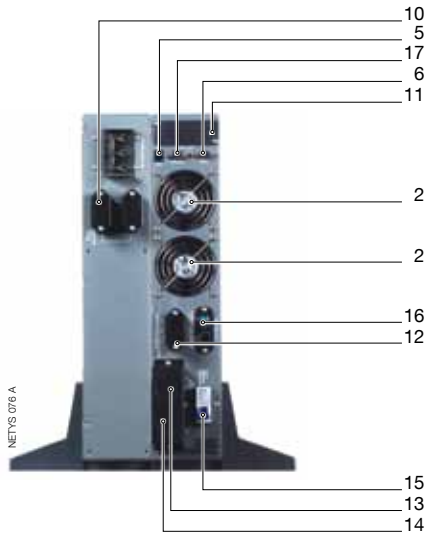
Connections



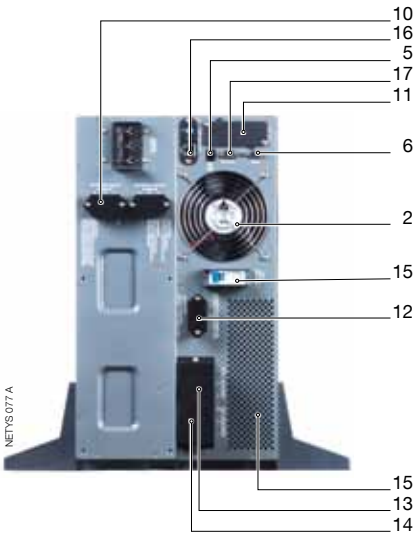
1100 VA



1700 VA - 2200 VA - 3000 VA



5000 VA - 7000 VA + battery



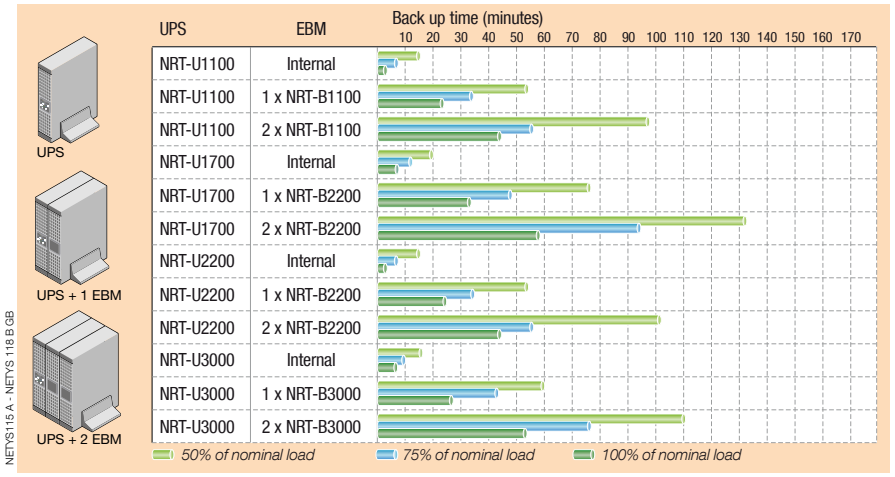
9000 VA - 11000 VA + battery

Converts from Tower to Rack mounted

APPLI 057 - 058 - 059 - 060 - 061 - 062 - 063 - 064 A

1. Mains input socket (IEC 320)
2. Fan
3. Output socket (full power)
4. Telephone/modem line protection
5. EPO (Emergency Power Off) input
6. RS232 interface (MODBUS protocol)
7. USB port
8. Input protection
9. Output sockets (IEC 320 - 10 A)
10. Battery extension connector
11. Slot for optional communication boards
12. Battery extension connector
13. Output terminals
14. Input terminals
15. Input switch
16. RJ45 LAN ethernet connector
17. Parallel port connector

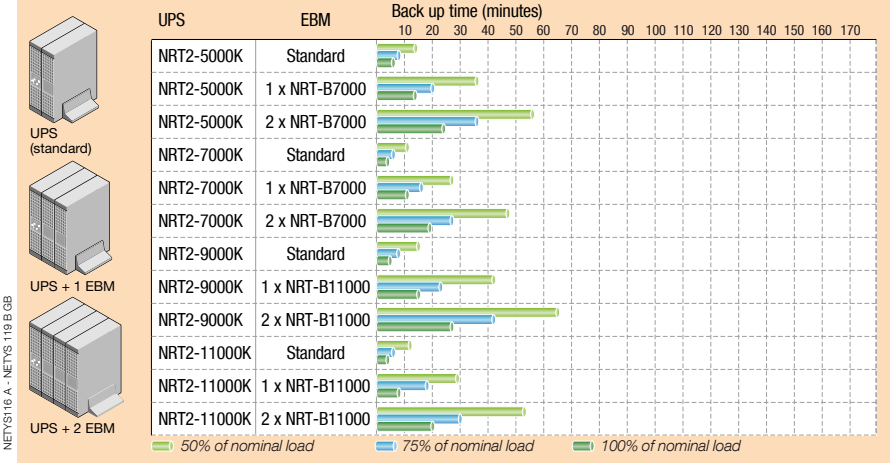
NETYS RT 1100-3000 VA - Battery extension



UPS	EBM	Back up time (minutes) 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170
NRT-U1100	Internal	
NRT-U1100	1 x NRT-B1100	
NRT-U1100	2 x NRT-B1100	
NRT-U1700	Internal	
NRT-U1700	1 x NRT-B2200	
NRT-U1700	2 x NRT-B2200	
NRT-U2200	Internal	
NRT-U2200	1 x NRT-B2200	
NRT-U2200	2 x NRT-B2200	
NRT-U3000	Internal	
NRT-U3000	1 x NRT-B3000	
NRT-U3000	2 x NRT-B3000	

50% of nominal load — 75% of nominal load — 100% of nominal load

NETYS RT 5000-11000 VA - Battery extension



UPS	EBM	Back up time (minutes) 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170
NRT2-5000K	Standard	
NRT2-5000K	1 x NRT-B7000	
NRT2-5000K	2 x NRT-B7000	
NRT2-7000K	Standard	
NRT2-7000K	1 x NRT-B7000	
NRT2-7000K	2 x NRT-B7000	
NRT2-9000K	Standard	
NRT2-9000K	1 x NRT-B11000	
NRT2-9000K	2 x NRT-B11000	
NRT2-11000K	Standard	
NRT2-11000K	1 x NRT-B11000	
NRT2-11000K	2 x NRT-B11000	

50% of nominal load — 75% of nominal load — 100% of nominal load

Parallel redundant operation for business continuity

To achieve the highest level of availability and to power critical utilities, NETYS RT UPS modules above 3 kVA can be configured for 1:1 redundancy.

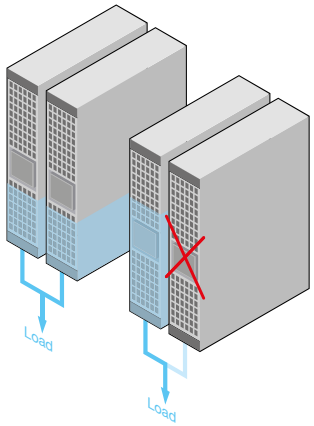
Redundant operation (1+1) means: the system incorporates one more UPS module than is needed to protect the load; in the event of a breakdown, it guarantees sufficient power supply capacity to the load by maintaining online protection.

Parallel technology is based on the principle of load sharing, whereby both units are always kept active.

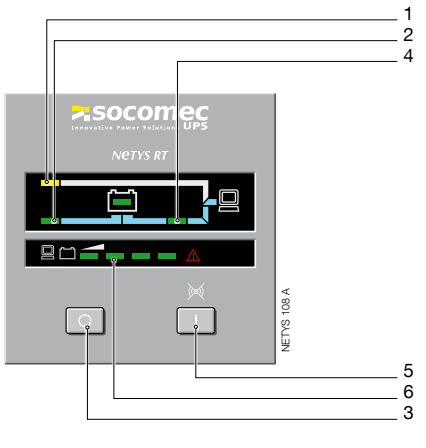
In a redundant configuration, overall system availability is much higher than a conventional UPS system using similar technology.

1+1 redundant configuration does not require additional circuits and can therefore be set up at a later date, simply by using two UPS modules and a collector/manual bypass module which simplifies cabling and maintenance of the UPS installation.

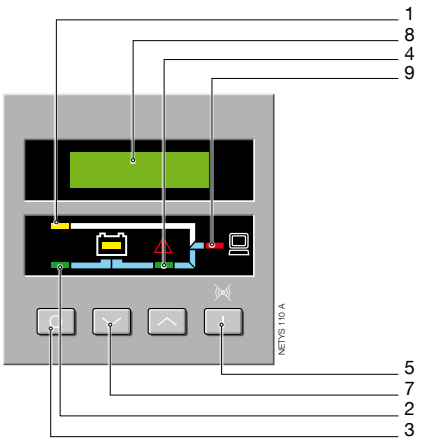
To further streamline the solution, it is also possible to select between operation with separate battery or shared battery, which is extremely useful in the case of applications requiring high levels of autonomy.



Control panel

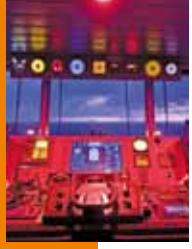


1100 VA - 1700 VA - 2200 VA - 3000 VA



5000 VA - 7000 VA - 9000 VA - 11000 VA

1. Yellow LED lit. Operation in bypass mode
2. Green LED lit. Mains healthy
3. OFF button
4. Green LED lit. Normal operation (inverter in-line)
5. ON/TEST and buzzer override button
6. LED bar. Depending on the situation, this indicates either the charge level or the capacity of the battery
7. Navigator buttons
8. Alphanumeric LCD display
9. Green LED lit. Status of the load



NETYS RT-M

from 1100 to 3000 VA

the high-performance UPS for marine applications

The solution for

- Steering systems
- Bridge systems
- Radar systems
- Control systems
- Video surveillance systems

Certifications

High availability in marine environments

The marine industry calls for reliable equipment which is able to supply applications operating in harsh environments. In such a context, power outages cause extremely serious problems to critical equipment for the navigation system, and communication and engine controls, which leads to costs increasing. In line with the company's commitment to develop innovative solutions to ensure availability, improve energy efficiency and reduce costs, SOCOMEC UPS has introduced NETYS RT-M, high-performance UPS DNV 2.4 standard certified.

DNV - Det Norske Veritas

DNV is a self-governing, independent foundation which aims to safeguard life, property and the environment, at sea and onshore. DNV undertakes classification, certification, and other verification and consultancy services relating to the quality of ships, offshore units and installations, and onshore industries worldwide, and carries out research in relation to these functions.

Easy to use

- Easy configurable frequency converter operation (50 Hz, 60 Hz).
- No configuration necessary on first startup.
- Wide range of communication protocols (including TCP/IP and SNMP) for integration into LAN networks or building management systems (BMS).

Meets practical needs

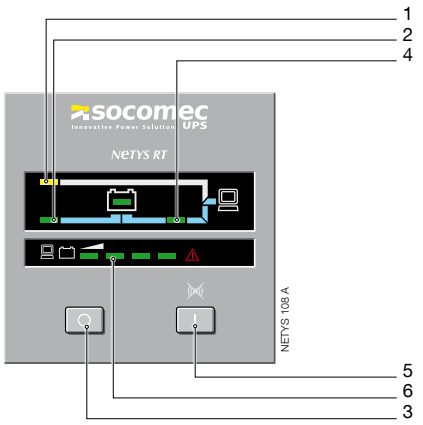
- Online double conversion technology with sinusoidal waveform, to completely filter out all disturbances from / to the mains power supply and to ensure maximum protection of the equipment.
- Optional battery extension modules (EBM) to meet wide back-up time requirements, even after installation.
- Clear and user-friendly LED interface, with buzzers that immediately indicate the operating status of the UPS, even for less specialist users.

Technical data

	NETYS RT-M			
Sn [VA]	1100	1700	2200	3000
Pn [W]	800	1200	1600	2100
Input / output	1/1			
Architecture	on-line double conversion VFI with input PFC and automatic bypass			
INPUT				
Rated voltage	230 V			
Voltage tolerance	160÷275 V; up to 130 V @70 % load			
Rated frequency	50/60 Hz			
Frequency tolerance	± 10% (Auto-Selectable)			
Power factor / THDI	> 0.98 / < 6 %			
OUTPUT				
Rated voltage	230 V			
Voltage tolerance	selectable 200/208/220/240 V			
Rated frequency	50 or 60 Hz			
Frequency tolerance	± 2% (± 0.05 Hz in battery mode)			
Overload	up to 105% continuously; 125% for 3 minutes; 150% for 30 seconds			
Connections	6 x IEC 320-C13 (10 A)	6 x IEC 320-C13 (10 A) + 1 x IEC 320-C20 (16 A)		
BATTERY				
Back-up time(1)	8 minutes	12 minutes	8 minutes	10 minutes
Voltage	24 Vdc	48 Vdc		72 Vdc
Recharge time	< 6 hours to recover 90% capacity			
COMMUNICATION				
Interfaces	RS232 (DB9 port) MODBUS protocol, USB HID protocol			
Ethernet	WEB / SNMP (Ethernet RJ45 port) - option			
COMM slots	1 available as standard			
Dry contacts card	Option			
EPO input	RJ11 port			
Modem/ADSL surge protection	avaialble as standard			
EFFICIENCY				
Online mode	up to 91%			
ENVIRONMENT				
Operating ambient temperature	from 0 °C up to +40 °C (from 15 °C to 25 °C for maximum battery life)			
Relative humidity	0 % - 95 % without condensation			
Maximum altitude	1000 m without derating (max. 3000 m)			
Acoustic level at 1 m (ISO 3746)	< 45 dBA			< 55 dBA
UPS CABINET				
Dimensions W x D x H	88.7 x 332 x 440 mm	88.7 x 430 x 440 mm		88.7 x 608 x 440 mm
Dimensions RACK U	2U			
Weight	13 kg	21 kg	22 kg	31 kg
Degree of protection	IP20			
EBM - EXTERNAL BATTERY MODULE				
Dimensions W x D x H	88.7 x 332 x 440 mm	88.7 x 430 x 440 mm		88.7 x 608 x 440 mm
Dimensions RACK U	2U			
Weight	16 kg	29 kg		43 kg
STANDARDS				
Safety	IEC 62040-1 (TÜV-GS certified)			
EMC	IEC 62040-2, DNV 2.4			
Performance	IEC 62040-3 (VFI-SS-111)			
Product declaration	CE, TÜV-GS, A-Tick, C-Tick, DNV type approval			

(1) @ 75 % of nominal load.

Control panel



1. Yellow LED lit. Operation in bypass mode
2. Green LED lit. Mains healthy
3. OFF button
4. Green LED lit. Normal operation (inverter in-line)
5. ON / TEST and buzzer override button
6. LED bar. Depending on the situation, this indicates either the charge level or the capacity of the battery

Standard electrical features

- Built-in backfeed protection.
- Protection against atmospheric phenomena (NTP) for telephone/ADSL modems.
- RJ11 connection for Emergency Power Off (EPO).
- Connection for battery extension modules.

Electrical options

- Battery extension modules.

Standard communication features

- LOCAL VIEW: ideal UPS monitoring and shutdown point-to-point solution for Windows®, Linux and Mac OS X® operating systems.
- HID: UPS management based on Windows® and Mac OS X® embedded service - USB interface.
- MODBUS/JBUS RTU.

Communication options

- RT-VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems.

ITYS

from 1 to 10 kVA

continuity solution for IT and industrial applications

The solution for

- Professional workstations
- Server and corporate networks
- Storage systems
- Industrial automation
- Security systems
- Telecom systems

Technology

- VFI “online double conversion”

High protection and high availability

- Online double conversion technology (VFI) and sinusoidal absorption compatible with all IT and industrial applications, operating environments and when used in conjunction with a generator set.
- Permanent regulation of output voltage and frequency.
- Wide tolerance of the input voltage limits the number of switchovers to battery mode, prolonging the battery life.
- The automatic bypass takes over immediately in the event of overloads or faults, ensuring continuous power supply to the loads.

Simple to install and easy to use

- The UPS comes ready for power up with the internal batteries connected and fully charged. The auto restart function to restart even in the event of prolonged power failure.
- No special plant preparation required thanks to the built-in magneto-thermal protection.
- The power distribution graphic display shows at-a-glance if the system is working correctly or not. Battery health can be checked either via the control panel or using a remote PC.

Operating efficiency and versatility

- The standard configuration and the communication accessories can easily be adapted to a wide range of operating environments.
- The manual bypass means that on site periodic and / or emergency maintenance can be performed on the 6 and 10 kVA models without having to disconnect the loads.
- The communication software can be used to program scheduled start-up and shutdown where automatic power management procedures are required.

Standard communication features

- LOCAL VIEW: ideal UPS monitoring and shutdown point-to-point solution for Windows®, Linux and Mac OS X® operating systems.
- MODBUS/JBUS RTU (RS232).

Communication options

- NET VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems.
- Dry-contact interface.

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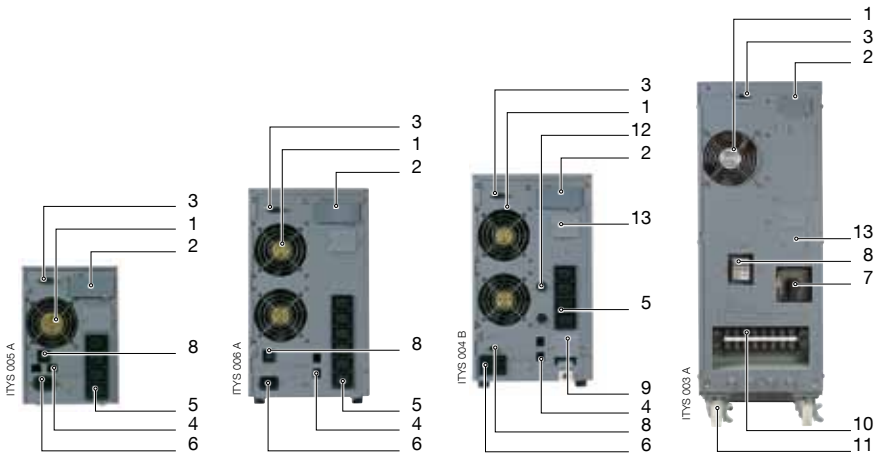
Connections



ITYS 1 kVA | ITYS 2 kVA | ITYS 3 kVA | ITYS 6 - 10 kVA

1. Fan
2. Slot for optional communication boards
3. RS232 serial port (MODBUS protocol)
4. Telephone / modem / ASDL line protection
5. Output sockets (IEC 320)
6. Input socket (IEC 320)
7. Manual by pass
8. Input protection (thermal breaker)
9. Output terminals
10. Input / output terminals
11. Wheels with security lock
12. Selective protection fuse on output sockets
13. Connection for external battery cabinet (LB models only)

Technical data

	ITYS				
Sn	1000 VA	2000 VA	3000 VA	6000 VA	10000 VA
Pn	700 W	1400 W	2100 W	4200 W	7000 W
Input/output	1/1				
INPUT					
Rated voltage	230 V				
Voltage tolerance	160÷300 V (up to 110 V at 60 % of the load)			176÷276 V	
Rated frequency	50/60 Hz				
OUTPUT					
Rated voltage	230 V (can be set to 220/240 V)				
Voltage tolerance	± 1.5%			± 1%	
Rated frequency	Syncro range 46÷54 Hz				
Overload	Up to 150 % for 30 seconds			Up to 130 % for 10 minutes	
Connections	4 x IEC 320	6 x IEC 320	4 x IEC 320 + terminals	terminals	
BATTERIES					
Type	sealed lead-acid maintenance free - expected life 3/5 years				
Back-up time @75% of the rated load	10 min	17 min	9 min/without internal batteries	13 min/without internal batteries	9 min/without internal batteries
COMMUNICATION					
Interfaces	RS232 on DB9 connector (MODBUS protocol)				
COMM slots	•	•	•	•	•
Modem/ADSL surge protection	•	•	•	•	-
EFFICIENCY					
Online mode	up to 90%				
UPS CABINET					
Dimensions W x D x H	145 x 400 x 220 mm	192 x 460 x 350 mm		260 x 570 x 715 mm	
Weight	14 kg	34 kg	35 / 16 kg	84 / 35 kg	93 / 38 kg
Degree of protection	IP20 (compliant with a IEC 60529)				
STANDARDS					
Safety	EN 62040-1, AS 62040-1				
EMC	EN 62040-2, AS 62040-2 Equipped with input filters to eliminate atmospheric disturbance				
Product certification	CE				

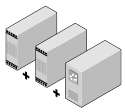
Battery extension (available with LB models only)

ITYS 029 A

ITYS	UPS +1 EBM
3000	75 min. +2 (ITY-EX030B)
6000	50 min. +1 (ITY-EX0100B)
10000	27 min. +1 (ITY-EX0100B

(@ 75% of rated load)

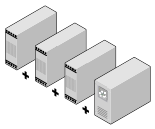
ITYS 030 A



ITYS	UPS +2 EBM
3000	30 min. +1 (ITY-EX030B)
6000	100 min. +2 (ITY-EX0100B)
10000	58 min. +2 (ITY-EX0100B)

(@ 75% of rated load)

ITYS 031 A



ITYS	UPS +3 EBM
3000	120 min. +3 (ITY-EX030B)
6000	150 min. +3 (ITY-EX0100B)
10000	90 min. +3 (ITY-EX0100B)

(@ 75% of rated load)

ITYS ES

from 1000 to 3000 VA - Electrical Substation solutions for supplying MV/LV transformer cabins

The solution for

> Control devices
> Electric lines

Technology

> VFI “online double conversion”

High protection and high availability

- The ITYS ES series is a range of compact UPS systems available in 1000, 2000 and 3000 VA models with on-line double conversion technology (VFI) with sinusoidal absorption.
- ITYS ES guarantees permanent regulation of the output voltage and frequency. This technology is compatible with all IT and industrial applications and operating environments, installations with generator sets included.
- Wide tolerance on input voltage ensures that switchovers to battery mode are infrequent, significantly prolonging battery lifetime.
- The automatic bypass device switches over in zero time in the event of overload or failure, guaranteeing uninterrupted services.

Straightforward to install and easy to use

- The UPS is shipped ready for connection with internal batteries connected and charged.
- ITYS ES, with the manual bypass option is easy to install without any special plant engineering preparation, as it is equipped with built-in thermal protection.
- The LED monitoring/control panel and a buzzer make the equipment extremely easy and intuitive to use. The graphic indicating the power distribution path shows at a glance whether or not the system is working as it should.
- Battery efficiency can be tested via the control panel or using dedicated software.

Operating efficiency and versatility

- The versatility of these models makes them suitable for protecting critical devices in the industrial field.
- The standard equipment and communication accessories have been specially designed to satisfy the typical needs of installation or use in transformer cabins.
- In situations where automatic power management procedures are required, the communication software can be used to programme scheduled start-up and shutdown times.
- Restarting the UPS from the battery to power the DG before closing the main isolator.

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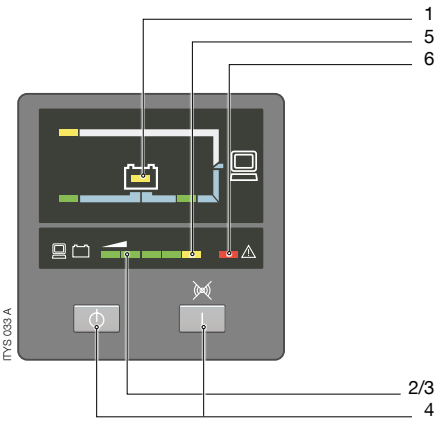
UPS - Technical data

	ITYS ES - UPS		
Item Code	ITYS ES 1k0	ITYS ES 2k0	ITYS ES 3k0
Sn [kVA]	1000	2000	3000
Pn [kW]	700	1400	2100
Input / output	1/1		
INPUT			
Rated voltage	230 V		
Voltage tolerance	160-300 V (up to 110 V at 60% of the load)		
Rated frequency	50/60 Hz		
Power factor	0.98		
OUTPUT			
Rated voltage	230 V (can be set to 220/240 V)		
Voltage tolerance	± 1.5%		
Rated frequency	range of synchronism 46-54 Hz		
Frequency stability (for 50 Hz)	50 Hz ± 0.2 in battery mode		
Overload	up to 150 % for 30 seconds		
Crest factor	3:1		
Wiring	4 x IEC 320	6 x IEC 320	4 x IEC 320 + terminals
BATTERIES			
Type	sealed lead-acid maintenance free - expected lifetime 3-5 years		
Back-up time at 75% of the rated load(1)	10 minutes	17 minutes	9 minutes
Sized for a back-up time of	115 minutes @ 50 W	154 minutes @ 100 W	216 minutes @ 150 W
Back-up time(2) + switching back on	60 minutes @ 50 W	60 minutes @ 100 W	60 minutes @ 150 W
Battery test	•	•	•
COMMUNICATION			
Interfaces	RS232 (DB9 connector) MODBUS protocol		
Communication slots	•	•	•
Modem/ADSL protection	•	•	•
EFFICIENCY			
On-line mode	up to 90%		
ENVIRONMENT			
Ambient service temperature	from 0 °C up to +40 °C (from 15 °C to 25 °C for maximum battery lifetime)		
Relative humidity	0-90 % non-condensing		
Maximum altitude	1000 m without de-rating (3000 m max)		
Noise level at 1 m	45 dBA		
UPS			
Dimensions W x D x H	145 x 400 x 220 mm	192 x 460 x 350 mm	
Weight	14 kg	34 kg	35 / 16 kg
Protection rating	IP20 (according to IEC 60529)		
Colours	Cabinet 430C, front 431C		
COMPLIANCE WITH STANDARDS			
Safety	EN 62040-1		
EMC	EN 62040-2 Equipped with input filters to suppress atmospheric interference		
Product certification	CE		
	ITYS ES - Manual bypass (3)		
Sn [kVA]	1000	2000	3000
INPUT			
Type of terminals	CBD6		
Wire Size	6 mm² max		
Nominal current	13.05 A max		
BYPASS			
Switching positions	1: UPS - 2: MAINS		
Switching time	6 ms max		
LOAD OUTPUT			
Type of terminals	CBD6		
Wire Size	6 mm² max		
UPS SUPPLY OUTPUT			
Type of socket	IEC 320 10 A		IEC 320 16 A
SURGE ARRESTORS (on request)			
Type	"L" in compliance with CEI EN 61643-11		
L/N pulse current	40 kA (8/20) max		
VAC N/GND	255 V max		
VACL/N	320 V max		

(1) @ 25 °C with charged battery.
(2) Factory setting: back-up time limited to 60 minutes to permit subsequent restarting with battery.
(3) Upon request.

The command / control panel



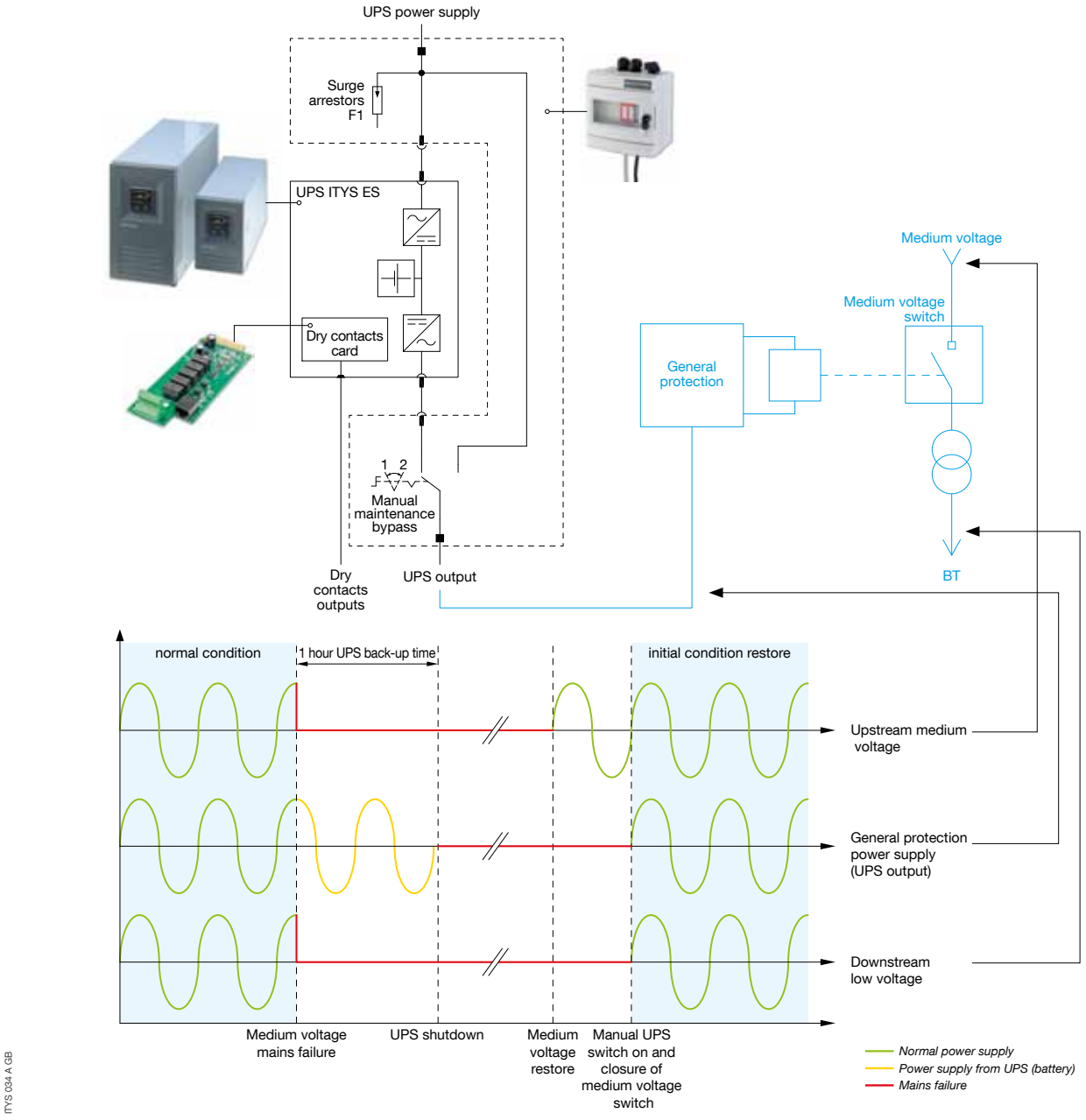
Graphic operating status:
1. Battery indicator
2. LED bar - % of connected load
3. LED bar - % battery available
4. ON/OFF buttons and deactivation of the buzzer
5. Overload indicator
6. Fault indicator

ITYS ES

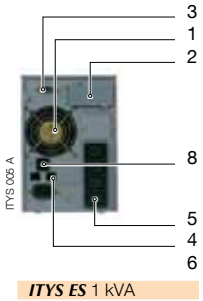
from 1000 to 3000 VA - Electrical Substation

Single-phase UPS systems

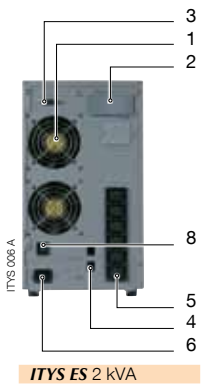
Architecture



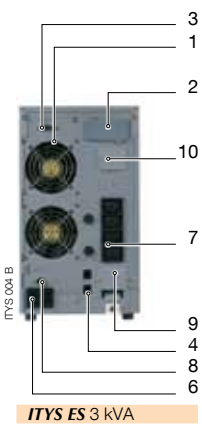
Connections



ITYS ES 1 kVA



ITYS ES 2 kVA



ITYS ES 3 kVA

1. Fan
2. Slot for optional communication boards
3. RS232 serial port (JBUS protocol)
4. Telephone / modem / ASDL line protection
5. Output sockets (IEC 320)
6. Input socket (IEC 320)
7. Manual bypass
8. Input protection (Thermal breaker)
9. Output terminals
10. Connection for external battery cabinet (LB models only)

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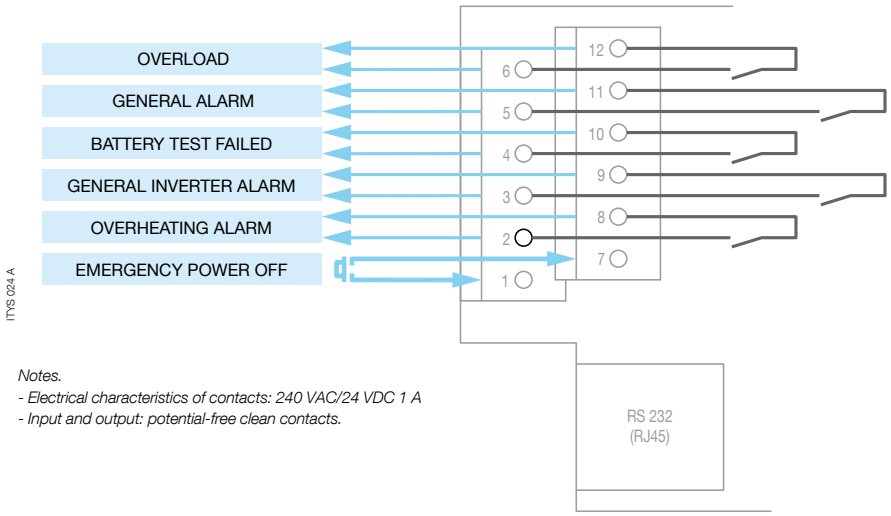
Programmable clean contacts board (option)

Dedicated interface with clean contacts, can be installed on the rear slot: gives the status of the UPS with five potential-free contacts and provides an input for remote emergency stopping (EP0).


ITYS 023 A



ITYS 024 A

Notes.
- Electrical characteristics of contacts: 240 VAC/24 VDC 1 A
- Input and output: potential-free clean contacts.

Standard communication features

- LOCAL VIEW: ideal UPS monitoring and shutdown point-to-point solution for Windows®, Linux and Mac OS X® operating systems.
- MODBUS/JBUS RTU (RS 232).

Communication options

- NET VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems.
- Dry contact interface.

Manual bypass (option)

Specially designed for ITYS ES, the manual bypass option enables:

- simplified installation: connection to the system is made with industrial grade terminals, while connection to the UPS is via the pre-wired plug and socket supplied.
- easy maintenance and uninterrupted operation: thanks to the manual bypass isolator it is possible to service or replace the UPS while maintaining the power supply to the devices downstream in complete safety for the operator. This operation has been specially devised to be simple to carry out, even in an emergency.
- increased level of equipment immunity to surge voltages, typical for this type of application, thanks to suitable surge arrestors included in addition to standard UPS protection.

ITYS 025 A

Tech info

The CEI 016 STANDARD for auxiliary cabin equipment requires an uninterrupted power supply to the control circuits for the PG and DG.

The control circuits for the PG, DG and coil must be powered by the same auxiliary voltage when there is no power. The power supply must be guaranteed for a back-up time of 1 hour, either by the UPS or by buffer batteries.

The DG must be powered up by skilled personnel if out of service for a long time due to maintenance or failure.

It is necessary to power the DG before closing the main isolator.

The required protection comprises:

- Mains power cuts due to poor maintenance of the user's system.
- Inappropriate tripping of the DG because of faults in the trip circuit.
- Alert signalling if the DG trips due to a power failure (system with regular maintenance).

MODULYS

from 1.5 to 24 kVA

a modular UPS for mission critical applications

The solution for

- e.business
- Server farms
- Telecommunications
- Medical
- Computer networks

Technology

- VFI “online double conversion”

Range description and features

Upgradable over time

- MODULYS adapts easily to changes and to the growth of your system. Power modules of 1.5, 3, 4.5 and 6 kVA, in tower, rack and system versions are easily combined to ensure the ideal configuration.

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

- 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

- MODULYS modular design 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.

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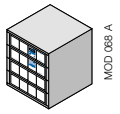
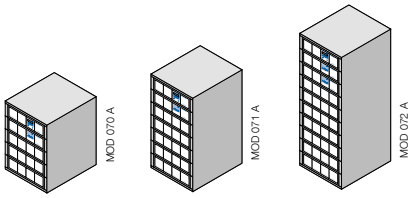
Range

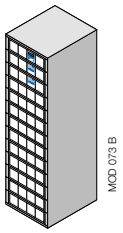
Mod-RM expandable from 1.5 to 9 kVA



Mod-MC expandable from 1.5 to 24 kVA



Mod-EB expandable from 9 to 24 kVA



Model	RM 315	RM 330	MC 415	MC 430	MC 645	MC 660	MC 660 SIX	MC 960	MC 990 SIX	MC 912 SIX	EB1290	EB 1212 SIX
Mod-Power	1 x 1500 VA	1 x 3000 VA	1 x 1500 VA	1 x 3000 VA	1 x 4500 VA	2 x 3000 VA	1 x 6000 VA	1 x 3000 VA	2 x 4500 VA	2 x 6000 VA	2 x 4500 VA	2 x 6000 VA
Battery pack	1	2	1	2	3	4	4	4	6	8	6	8

Standard electrical features

- Separate bypass input.
- 4 dry contacts relay card.

Electrical options

- Temperature sensor.

Standard communication features

- 2 slots for communication options.
- MODBUS/JBUS RTU (RS232).

Communication options

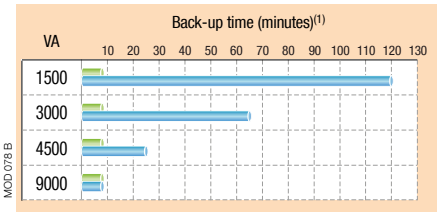
- Dry-contact interface.
- Remote mimic panel.
- NET VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems.

Technical data

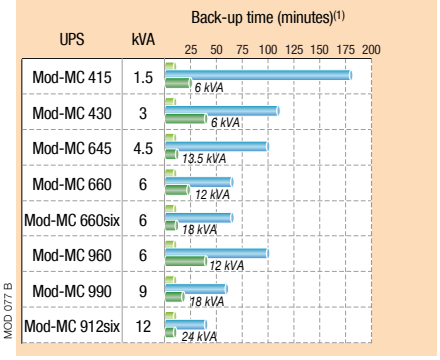
	MODULYS			
Mod-Power				
Sn [VA]	1500	3000	4500	6000
Pn [W]	1050	2100	3150	4200
Input/output	1/1		1/1, 3/1	
INPUT				
Rated voltage	230 V (1ph)		230 V (1ph + N) or 400 V (3ph + N)	
Voltage tolerance	± 20% (up to -30% at 70% nominal load)			
Rated frequency	50/60 Hz			
Frequency tolerance	± 10%			
Power factor/THDI	> 0.99/6%			
OUTPUT				
Rated voltage	230 V (1ph + N)			
Voltage tolerance	± 3% (can be set 208/220/240 V)			
Rated frequency	50/60 Hz			
Frequency tolerance	± 2% (± 0.1% autonomous frequency)			
Overload	110% for 1 minute, 130% for 10 seconds, 200% for 5 cycles			
Crest factor	3:1			
BYPASS				
Rated voltage	voltage selected			
Voltage tolerance	± 15%			
Rated frequency	frequency selected			
Frequency tolerance	± 2%			
EFFICIENCY				
Online mode	up to 91%			
Eco Mode	97%			
ENVIRONMENT				
Operating ambient temperature	0 °C to + 40 °C (15 °C to 25 °C for best battery life)			
Relative humidity	0 % - 90 % without condensation			
Maximum altitude (above sea level)	1000 m without de-rating (maximum 3000 m)			
Mod-System MODULYS MC				
Mod-MC 4XX - 4 slots W x D x H	550 x 625 x 760 mm			
Mod-MC 6XX - 6 slots W x D x H	550 x 625 x 1026 mm			
Mod-MC 9XX - 9 slots W x D x H	550 x 625 x 1425 mm			
Weight	depending on the configuration			
Degree of protection	IP20			
Acoustic level at 1 m (ISO 3746)	< 52 dBA (Mod-MC 4XX)		< 60 dBA (Mod-MC 6XX and Mod-MC 9XX)	
Heat dissipation	530 W (Mod-MC 4XX)	700 W (Mod-MC 6XX)	2090 W (Mod-MC 9XX)	
Connections	terminals			
STANDARDS				
Safety	EN 62040-1			
EMC	EN 62040-2			
Performance	EN 62040-3			
Product declaration	CE			

An adaptable system

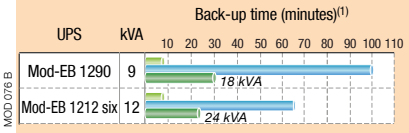
Mod-RM



Mod-MC



Mod-EB



Standard
Maximum
Expandable

(1) Max BUT @ 75% load

MASTERYS BC

from 8 to 12 kVA

for critical IT and light industrial applications

The solution for

> Light industrial applications
> Servers
> Telecommunications
> Medical and laboratories

Technology

> VFI “online double conversion”

The ideal protection

- Simple and reliable power protection.
- Tailored for medium-sized businesses.
- Advantages of advanced technology.

An excellent size/power/ backup time ratio

- Ideal for sensitive professional applications.
- Suitable for protection in IT environments thanks to the internal back-up time and the possibility of installation in 19” rack cabinets.

Tailored to your environment

- Easy to install.
- Unique to the market with its highly compact size.
- Flexible back-up times: different back-up time configurations are available either within the UPS standard cabinet or by using taller UPS cabinets, without changing the floor space (W = 444, D = 795 mm).
- Increased system availability placing two UPS in parallel.
- Combi Concept: BC108 and BC110 models are compatible with single or three-phase inputs, which can be configured during installation.
- Fitted with a multilanguage LCD display.
- Separate rectifier supply and bypass networks.

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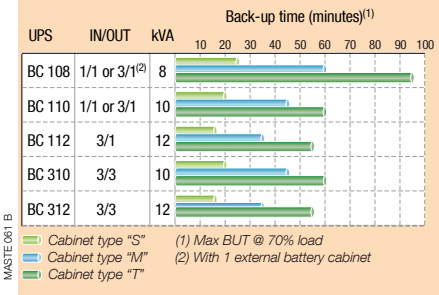
Technical data

	MASTERYS BC 8-12		
Sn [kVA]	8	10	12
Pn [kW]	5.6	7	8.4
Input / output 1/1	•(1)	•(1)	-
Input / output 3/1	•(1)	•(1)	•
Input / output 3/3	-	•	•
Parallel configuration	up to 2 units		
INPUT			
Rated voltage	230 V (1ph + N), 400 V (3ph + N)		
Voltage tolerance	± 20 % (up to -35 % at 70 % nominal load)		
Rated frequency	50/60 Hz ± 10 %		
Power factor / THDI	0.99 / < 6 %(2)		
OUTPUT			
Rated voltage	230 V (1ph + N), 400 V (3ph + N)		
Voltage tolerance	± 1 % 1ph + N can be configured 208(3)/220/230/240 V 3ph + N can be configured 360(3)/380/400/415 V		
Rated frequency	50/60 Hz		
Frequency tolerance	± 2 % (configurable from 1 % to 8 % with generating set)		
Overload	125 % for 2 minutes, 150 % for 10 seconds		
Crest factor	3:1 (complying with IEC 62040-3)		
Power factor without derating	up to 0.9 leading (up to 0.7 leading for 10 minutes)		
BYPASS			
Voltage tolerance	230 V (1ph + N), 400 V (3ph + N) ± 15 % (configurable from 10 % to 20 %)		
Frequency tolerance	50/60 Hz ± 2 % (configurable from 1 % to 8 %)		
EFFICIENCY			
Online mode	up to 92 %		
Eco Mode	up to 98 %		
ENVIRONMENT			
Operating ambient temperature	from 0 °C up to +40 °C (from 15 °C to 25 °C for maximum battery life)		
Relative humidity	0 % - 95 % without condensation		
Maximum altitude	1000 m without derating (max. 3000 m)		
Acoustic level at 1 m (ISO 3746)	< 50 dBA		< 52 dBA
UPS CABINET			
Dimensions type S (short) W x D x H	444 x 795 x 800 mm		
Dimensions type M (medium) W x D x H	444 x 795 x 1000 mm		
Dimensions type T (tall) W x D x H	444 x 795 x 1400 mm		
Weight with standard batteries	155 kg	160 kg	175 kg
Degree of protection	IP20 (according to IEC 60529)		
Colours	RAL 7012, plastic front panels: dark grey		
STANDARDS			
Safety	EN 62040-1, EN 60950-1-1		
EMC	EN 62040-2		
Performance	EN 62040-3 [VFI-SS-111]		
Product declaration	CE		

(1) Combi: single or three-phase input configurations. - (2) 1/1 configuration, THDI < 25% for 3/1 configuration.
(3) @ Pout = 90% Pnom.

UPS and batteries



Standard electrical features

- Backfeed protection: detection circuit.
- EBS (Expert Battery System) for battery management.

Electrical options

- Dual input mains.
- Internal maintanance bypass.
- External maintanance bypass.
- External battery cabinet.
- Galvanic isolation transformer.
- Parallel kit.

Standard communication features

- 2 slots for communication options.
- MODBUS/JBUS RTU (RS232/RS485).

Communication options

- Dry-contact interface.
- Remote mimic panel.
- PROFIBUS.
- NET VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management.

MASTERYS BC

from 15 to 40 kVA

solutions for your business critical applications

The solution for

- Data centres
- Telecommunications
- Service Sector

Technology

- VFI “online double conversion”

Certifications

The ***MASTERYS BC*** series is certified by TÜV SÜD with regard to product safety (EN 62040-1).

A complete, cost-effective solution

- Online double conversion mode with an output power factor of 0.9 providing 12% more active power compare to UPS with a power factor of 0.8.
- Dual input mains allows you to manage independent power sources.
- Increased system availability placing two UPS in parallel for 1+1 redundancy.
- Internal manual bypass for easy maintenance without power interruption.
- Internal batteries providing more than 1 hour runtime.
- Multilanguage display.

Tailored to your environment

- Saves space with a reduced footprint and optimized cabinet size.
- Low noise level.
- Flexible battery solutions
- Compact, lightweight and easy to install.
- Extended battery life and performance with exclusive EBS battery charging management for increased battery life.

Standard electrical features

- Dual input mains.
- Internal manual bypass.
- Backfeed protection: detection circuit.
- EBS (Expert Battery System) for battery management.

Electrical options

- External battery cabinet.
- External temperature sensor.
- Additional battery chargers.
- Galvanic isolation transformer.
- Parallel kit.
- ACS synchronization system.

Standard communication features

- MODBUS/JBUS RTU (RS232/RS485)
- 2 slots for communication options.

Communication options

- Dry-contact interface.
- Remote mimic panel
- PROFIBUS.
- NET VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems.

Remote monitoring service

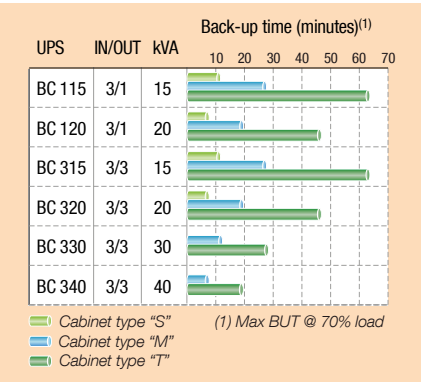
- Remote mobile and web-based surveillance service connected 24/7 to your local Socomec Service Centre.

Technical data

	MASTERYS BC			
Sn [kVA]	15	20	30	40
Pn [kW]	13.5	18	27	36
Input / output 3/1	•	•	-	-
Input / output 3/3	•	•	•	•
Parallel configuration	1+1(1)			
INPUT				
Rated voltage	400 V 3ph + N			
Voltage tolerance	240 V to 480 V(2)			
Rated frequency	50/60 Hz ± 10%			
Power factor / THDI	0.99 / < 3%			
OUTPUT				
Rated voltage	1ph + N: 230 V (can be configured 220/240 V) 3ph + N: 400 V (can be configured 380/415 V)			
Voltage tolerance	static load ±1 % dynamic load in accordance with VFI-SS-111			
Rated frequency	50/60 Hz			
Frequency tolerance	± 2% (configurable from 1% to 8%)			
Overload	125% for 10 minutes, 150% for 1 minute			
Crest factor	3:1			
BYPASS				
Rated voltage	rated output voltage			
Voltage tolerance	± 15% (configurable with from 10% to 20%)			
Rated frequency	50/60 Hz			
Frequency tolerance	± 2% (configurable for Genset compatibility)			
EFFICIENCY				
Online mode @ 100 % of load	up to 94%			
ENVIRONMENT				
Operating ambient temperature	from 0 °C up to +40(2) °C (from 15 °C to 25 °C for maximum battery life)			
Relative humidity	0% - 95% without condensation			
Maximum altitude	1000 m without derating (max. 3000 m)			
Acoustic level at 1 m (ISO 3746)	< 52 dBA	< 55 dBA		
UPS CABINET				
Dimensions W x D x H	444 x 795 x 800/1000/1400 mm			
Weight(3)	105 kg	110 kg	135 kg	152 kg
Degree of protection	IP20			
Colours	RAL 7012			
STANDARDS				
Safety	EN 62040-1 (TÜV SÜD certified), EN 60950-1			
EMC	EN 62040-2			
Performance	EN 62040-3 (VFI-SS-111)			
Product declaration	CE			

(1) The standard model is prepared for a 1+1 redundant system. Upon request, it is possible to have connected up to 6 modules in a parallel system. (2) Conditions apply. (3) Without batteries.

UPS and internal batteries



CPSS *Emergency**

from 3 to 40 kVA

a centralized power supply for your emergency systems

MODULYS
3-6 kVA

MASTERYS
10-40 kVA

The solution for

- Airports
- Railways and bus stations
- Schools and universities
- Hospitals
- Shopping centers
- Cinemas and theatres
- Museums

Technology

- VFI “online double conversion”

Compliance with standards

EM — EN 50171

EL — EN 50171
NF C 71815

CPSS Emergency EM

Ensure the power supply to emergency lighting, safety signalling lighting and anti-panic systems.

Designed and manufactured in compliance with standard **EN 50171**:

- metal enclosure compliant with EN 60598-1,
- batteries with 10-year life expectancy,
- minimum backup time: 60 minutes at the end of battery life,
- quick battery charging time: up to 80 % capacity within 12 hours,
- protection against battery polarity inversion,
- deep discharge battery protection,
- specific remote contacts and notifications.

CPSS Emergency EL

Ensure the power supply to emergency lighting, safety signalling lighting and anti-panic systems.

Designed and manufactured in compliance with standard **EN 50171** and **NF C 71815**:

- metal enclosure compliant with EN 60598-1,
- batteries with 10-year life expectancy,
- minimum backup time: 60 minutes at the end of battery life,
- quick battery charging time: up to 80 % capacity within 12 hours,
- protection against battery polarity inversion,
- deep discharge battery protection,
- specific remote contacts and notifications
- connection to downstream IT systems,
- galvanic isolation transformer,
- permanent isolation controller.

* *Please check the product availability for your country*
Products can be adapted to application and site specifications.

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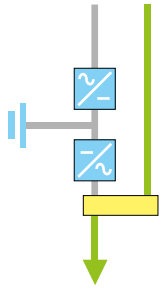
Innovative Power Solutions

Technical data

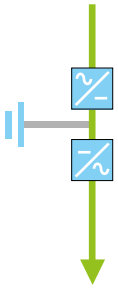
	MODULYS			MASTERYS				
Sn [kVA]	3	4.5	6	10	15	20	30	40
Pn [kW]	2.1	3.2	4.2	9	13.5	18	27	36
Pn according to EN 50171 [kW]	1.8	2.6	3.5	7.5	11.3	15	22.5	30
Input / output 1/1	•	•	•	-	-	-	-	-
Input / output 3/1	-	-	-	•	•	•	-	-
Input / output 3/3	-	-	-	•	•	•	•	•
INPUT								
Rated voltage	230 V (1ph + N)			400 V (3ph + N)				
Voltage tolerance	± 20%							
Rated frequency	50-60 Hz							
Frequency tolerance	± 10%							
Power factor / THDI	> 0.98 / < 5%			> 0.99 / < 6%				
OUTPUT								
Rated voltage	230 V (1ph + N)			230 V (1ph + N) - 400 V (3ph + N)				
Voltage tolerance	± 3%			± 1%				
Rated frequency	50-60 Hz							
Frequency tolerance	± 0.1%							
Overload	110% for 5 minutes 130% for 5 sec			125% for 10 minutes 150% for 1 minute				
Crest factor	3:1							
INTERNAL BATTERIES								
Back-up time @ 25% load	300 min	250 min	300 min	280 min	-	-	-	-
Back-up time @ 50% load	230 min	200 min	230 min	140 min	-	-	-	-
Back-up time @ 75% load	140 min	120 min	140 min	90 min	-	-	-	-
Back-up time @ 100% load	100 min	100 min	100 min	60 min	-	-	-	-
EXTERNAL BATTERIES								
Back-up time @ full and partial load	-			> 60 min				
UPS CABINET								
Dimensions W x D x H	444 x 795 x 1000 mm			444 x 795 x 1400 mm				
Weight	240 kg	330 kg	340 kg	190 kg	195 kg	240 kg	315 kg	415 kg
Degree of protection	IP20							
Acoustic level at 1 m (ISO 3746)	< 52 dBA			< 62 dBA				
STANDARDS (EM-EL MODELS)								
Central Power Supply System	EN 50171, NF C 71815							
Safety	EN 62040-1, EN 60950-1							
EMC	EN 62040-2							
Performance	EN 62040-3 (VFI-SS-111)							
Product declaration	CE							

Operating modes

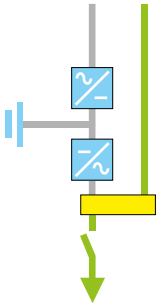
- Changeover mode.

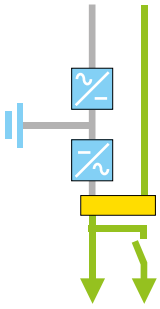

EM 017 A

- Parallel stand-by mode.

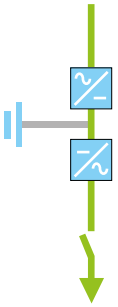

EM 018 A

- Changeover mode with additional control switch for central and partial load switching (on request).


EM 019 A


EM 020 A

- Non-maintained changeover mode.


EM 021 A

ASYS

16 A, 19” Rack mounted

a secure power supply close to your application

Your protection for

- Rack servers
- IT applications
- Routers, switches, hubs, etc

Advantage

RoHS COMPLIANT

Rack automatic system for IT networks

The ASYS automatic transfer system provides reliable redundant power to single corded IT equipment.

It performs an automatic and seamless transfer of the critical load to an alternate source in case of preferred source corruption.

The transfer is carried out without source overlapping.

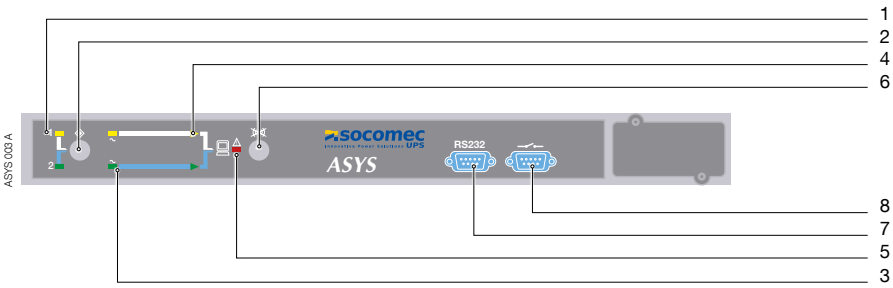
Continuity of service for critical applications

- Located as close as possible to the application, ASYS allows for a highly accessible architecture.
- ASYS has been designed to be easily installed near sensitive applications, to fit into 19” racks.

Easy site operation

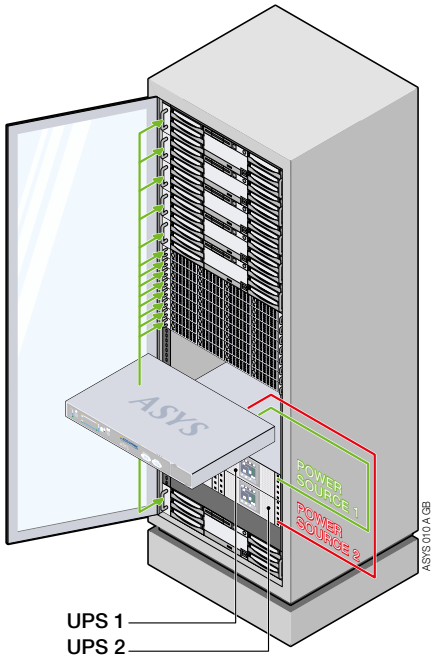
- Easy changing of the preferred supply path without modifying the cabling.
- Carried out by the operator and secured by the automatic control, ASYS switches the load from one path to the other.
- Provides redundant power supply to single corded equipment, servers, routers, switches, hubs, etc.
- Powered by two separate independent sources (UPS).
- Permanent source monitoring.
- Automatic switching to alternate source.
- Preferred source selection on front panel.
- Fast switching with synchronised or out of phase sources.
- Compact 19” rack 1U system

Front view



1. Preferred source indication
2. Preferred source selection
3. Input source status
4. Supplying source
5. General alarm
6. Buzzer acknowledge
7. RS232 communication port (MODBUS RTU)
8. Dry contacts communication port

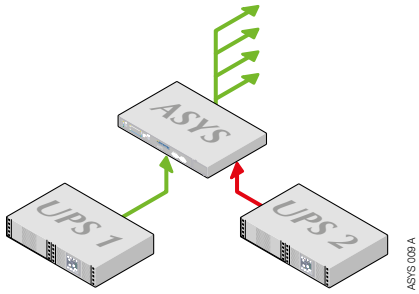
Application Rack



Technical data

	ASYS	
Model	16A-120	16A-230
INPUT		
Rated voltage	120 V	220/230/240 V (selectable)
Input voltage tolerance	±12% (±20% available on request)	
Rated frequency	50/60 Hz (auto sensing)	
Frequency tolerance	±15%	
Rated current	16 A	
OUTPUT		
Rated voltage	120 V	220/230/240 V (selectable)
Input voltage tolerance	±12%	
Rated frequency	50/60 Hz	
Frequency tolerance	±15%	
Rated current	16 A	
Transfer time	6 ms (typical), ≤ 15 ms (maximum)	
CONNECTION		
Input	AWG12X3C/20A	2 x IEC 320-C20
Output	4 x NEMA 5-20R	1 x IEC 320-C19
Communication	5 dry contacts, RS232	
ENVIRONMENT		
Operating ambient temperature	0 to 40 °C	
Relative humidity	20% - 85% without condensation	
Maximum altitude	≤ 1000 m without derating	
Acoustic level at 1 m (ISO 3746)	< 25 dBA	
Cooling	Natural	
MECHANICAL SPECIFICATIONS		
Dimensions W x D x H	430 x 315 x 44 mm (1U)	
Weight	5 kg	
Degree of protection	IP30	
Colours	Pantone 432C	
STANDARDS		
Safety	IEC 62310-1	
EMC	IEC 62310-2	

Example of possible architecture



RACK PDU

monitored and managed rack PDU

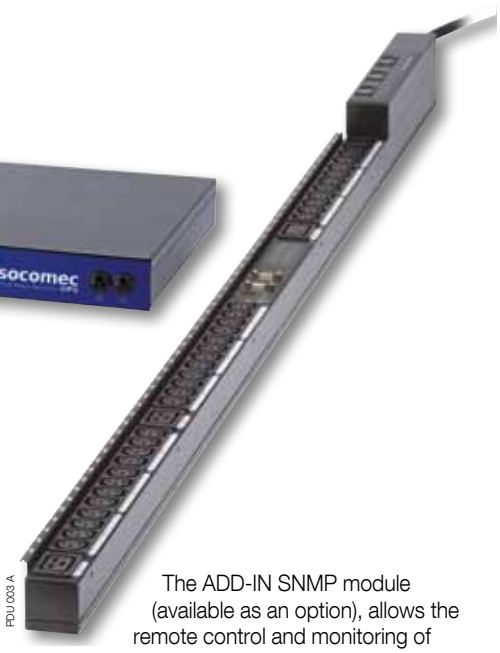
Power Distribution Unit

Power Management Solution

Your protection for

- Data centre rack cabinet
- Networking infrastructure
- Computer rooms

PDU 039 A



PDU 003 A

The ADD-IN SNMP module (available as an option), allows the remote control and monitoring of the PDUs via LAN network.

Ensuring efficient load development and power supply flexibility in server rooms is becoming increasingly important, which is why SOCOMEC offers a variety of PDUs for rack applications. SOCOMEC PDUs in 0U configuration (single-phase or three-phase) with metered or monitored technology, and PDUs in 1U configuration (still single-phase but with single or dual power supply) with managed technology, allow IT managers to find the configuration best suited to their requirements.

Metered or monitored Zero-U vertical PDU

With only one single-phase or three-phase input, these PDUs guarantee reliable power distribution for equipment with small and medium-scale energy requirements integrated into rack cabinets. The PDU does not require the installation of 'U space' due to its vertical position on the rear of the rack cabinet, and simplifies the electrical connection of many devices, saving time during fitting procedures and offering easy power supply configuration adjustment. The numerous output sockets and their positioning help this PDU fit perfectly into high density network solutions.

Using two PDUs in the same rack cabinet allows the development of a redundant architecture typical of critical applications which use dual cord electronic devices.

Monitoring and supervision

The two-digit LED display allows an easy reading and monitoring of the current consumption.

The reverse display function allows the cable input both from above and below, ensuring a proper reading in every installing position.

Managed 1U PDU

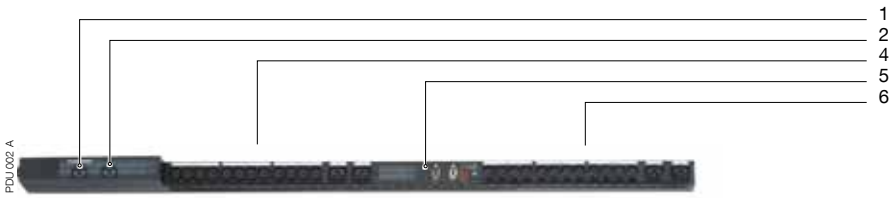
These PDUs, which have one or two single-phase inputs, are ideal for mission critical power distribution for equipment with small and medium-scale energy requirements integrated into rack cabinets. The extremely compact solution in a single rack unit allows installation inside the rack while guaranteeing at-a-glance data viewing via the display on the front panel. These PDUs offer an extremely sophisticated level of monitoring and management, meaning server consumption for each output socket can be measured as both instantaneous and cumulative values (current, energy and power factor) and recorded in log files which can be consulted and downloaded easily via a web interface. The individual sockets can also be controlled remotely (switch-on, switch-off or power-cycle), both manually and via the web interface or the remote console, or even in a scheduled manner.

Up to 5 PDUs can be connected in a 'daisy chain' configuration, allowing the control and monitoring of all PDUs from a single access point, transforming the PDUs into a real power management system. Extensive communication capability (web browser, NMS, Telnet, SNMP, HyperTerminal, SMTP, SSL V3, SSH V1), and the use of 'secure' protocols and multi-account management make it an ideal device for power management in IT applications.

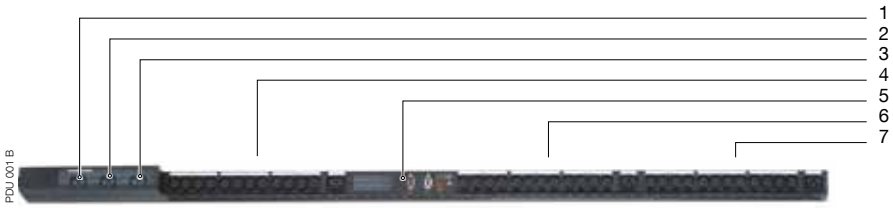
socomec Innovative Power Solutions

Zero-U PDU

Connections



Single-phase model



Three-phase model

1. ON-OFF switch segment #1
2. ON-OFF switch segment #2
3. ON-OFF switch segment #3
4. Output connectors segment #1
5. Front panel
6. Output connectors segment #2
7. Output connectors segment #3

Communication options

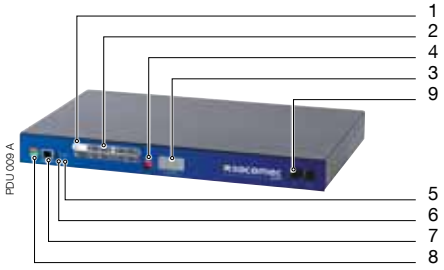
PDU VISION, WEB/SNMP manager interface for the connection to the LAN network. The device - suitable for remote monitoring – can be integrated into the PDU.

Technical data

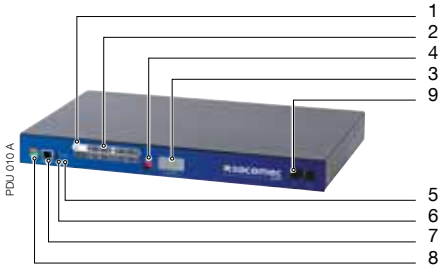
	Zero-U PDU	
Item code	NRT-OP-PDU1-28	NRT-OP-PDU3-39
Input/output	1/1	3/1
INPUT		
Rated voltage	200-240 V (1ph)	346-415 V (3ph, Y+N)
Rated frequency	50/60 Hz	
Rated current	32 A (1ph)	16 A (3ph)
Connector	IEC309-32 A	IEC309-16 A
OUTPUT		
Rated voltage	200-240 V	
Connectors	(24) IEC320-C13, (4) IEC320-C19	(36) IEC320-C13, (3) IEC320-C19
COMMUNICATION		
Interfaces	RS232 - (WEB/SNMP optional)	
Environmental sensor	•	•
ENVIRONMENT		
Operating ambient temperature	0 to 45 °C	
Relative humidity	5% to 95% without condensation	
Maximum altitude	operating: up to 2000 m	
RACK PDU		
Dimensions W x D x H	48 x 1250 x 50 mm	48 x 1560 x 50 mm
Weight	5.4 kg	6.0 kg

	iPDU	
Item code	PDU1U-I116-I011	PDU1U-I116-I012
Input/output	1/1	
INPUT		
Rated voltage	200-240 V (1ph)	
Rated frequency	50/60 Hz	
Rated current	16 A (1ph)	2x 16 A (1ph)
Connector	IEC320 C20	2x IEC320 C20
OUTPUT		
Rated voltage	200-240 V	
Connectors	(12) IEC320-C13	(6+6) IEC320-C13
COMMUNICATION		
Interfaces	RS 232 - WEB/SNMP	
ENVIRONMENT		
Operating ambient temperature	0 to 50 °C	
Relative humidity	10% to 80% without condensation	
Maximum altitude	operating: up to 2000 m	
RACK PDU		
Dimensions W x D x H	436 x 300 x 44 mm (1U)	
Weight	2.0 kg	

iPDU



Front Panel of 2-inlet Model



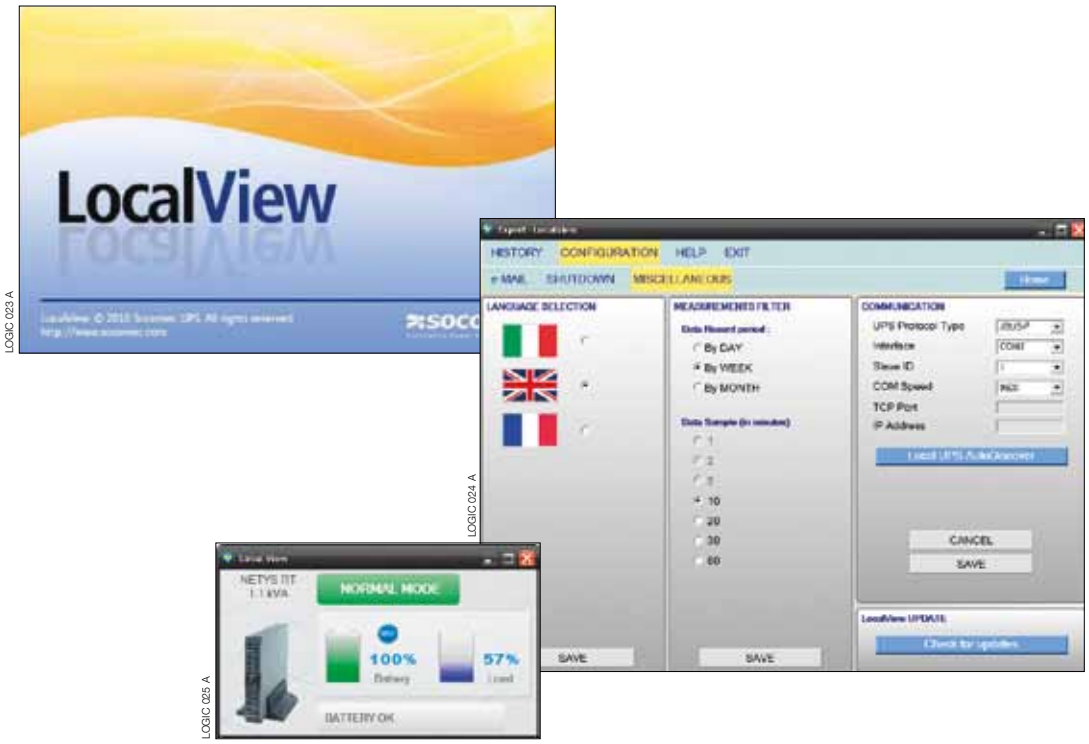
Front Panel of 1-inlet Model

1. Input power status indicator
2. Output power status indicator (A÷L)
3. Status indicator
4. Daisy-chaining Mode DIP Switch (C-link DIP)
5. Reset button
6. Operation mode DIP switch
7. Serial (CONSOLE) Port
8. Digital output
9. Breaker

LOCAL VIEW

Local management solution

the ideal software to protect SOHO IT applications



LOCAL VIEW is a monitoring and management software for UPS systems via USB or serial RS232 allowing the system's automatic shutdown in the event of a prolonged power cut.

LOCAL VIEW avoids data losses and system damage when the PC is not supervised by the operator during the power cut.

Its simple and user-friendly graphic interface makes it easy to use even for less experienced users.

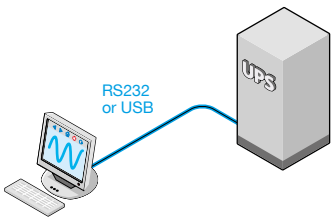
Available in several languages, LOCAL VIEW provides clear, immediate and detailed information about the status of the UPS.

It can be easily updated (via internet) to ensure the highest level of protection to PC, workstations and servers.

LOCAL VIEW is compatible with Windows Server™ 2000 / 2003 / 2003 R2 / 2008 / 2008 R2 / 2012 / XP / VISTA / 7 / 8 (32/64 bit), Linux Kernel 2.4 or later, Mac OS X® 10.6 or later.

UPS model	LOCAL VIEW	HID (1)
NeTYS PE	•	-
NeTYS PL	•	-
NeTYS PR Mini Tower	•	-
NeTYS PR Rack/Tower	•	•
NeTYS PR rack 1U	•	•
ITYS	•	-
NeTYS RT 1.1 - 3 kVA	•	•
NeTYS RT 5 - 11 kVA	•	-

(1) HID: Plug-and-Play Windows® and Mac Os X power management protocol



LOCAL VIEW advanced configuration mode.

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NET VISION

IP network management solution

professional LAN adapter for remote UPS monitoring and control

LOGIC 026 A

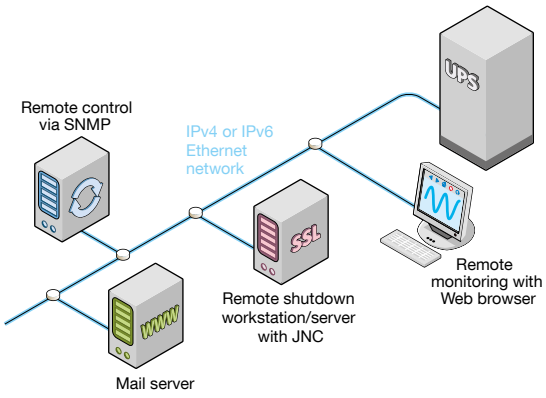
NET VISION LAN adapter allows a direct connection of the UPS to the ethernet network to enable the UPS to be managed through a protected access via web browser, TELNET interface or NMS application via SNMP protocol.

The protocols used for the connection are independent from both the platform and the operating system making NET VISION extremely flexible and suitable for all systems.

NET VISION adapter is not only for managing and monitoring. It also provides a high level of protection to the servers controlled by the UPS.

Under critical conditions, NET VISION adapter can in fact switch off all computers, workstations and servers powered by the UPS in an orderly, controlled manner to ensure data integrity. Shutdown procedure is guaranteed by a program known as the “shutdown agent”, supplied with NET VISION, which should be installed on all computers that require automatic shutdown.

MOD 067 A



LOGIC 017 B GB

Operating system	O.S. version
Microsoft™	Windows® 2000 SP4 or later
	Windows® Xp Sp2 or later
	Windows® 2003 / 2003 R2 Server (32 / 64 bit)
	Windows® 2008 Server (32 / 64 bit)
	Windows® 2012 Server
	Windows® Vista (32 / 64 bit)
	Windows® 7 (32 / 64 bit)
	Windows® 8
IBM	AIX 4.3.3 or later (RS6000-PowerPC)
	OS 400 V4R5 or later
SUN	SOLARIS 8 or later (SPARC / x86)
HP	HP-UX 10.20 or later
NOVELL	NETWARE 5.x or later
Linux	All versions distributed (32 bit)
Apple	Mac OS X® 10.6 or later

Communication interfaces

Software

Management solutions

EMD (Environment Module Device)

EMD is a device to be used in conjunction with some LAN interfaces and provides the following features:

- temperature and humidity measurements + dry contact inputs,
- alarm thresholds configurable via Web browser,
- notification of environmental alarm via email and SNMP traps.

EMD device for ***NET VISION***

EMD device for ***RT VISION***

Dry contact interface

Total compatibility

The dry contact interface enables the control of up to three digital inputs and four outputs for information processing:

- 3 insulated inputs (external contacts):
  - emergency stop devices (ESD),
  - operation with generating set,
  - battery protection status.
- 4 change-over contact outputs:
  - general alarm,
  - backup operation,
  - bypass operation,
  - preventive maintenance request.

These are fully configurable. Depending on the range, several ADC cards can be fitted to the UPS.

MASTE 013 B

SNMP/WEB interface

Communication via LAN

NET VISION, PDU VISION, RT VISION and some embedded LAN connections support SNMP to be monitored by remote NMS.

LOGIC 020 A

RT VISION

LOGIC 020 A

NET VISION

PDU 008 A

PDU VISION

Serial port interface

Communication via RS232, RS422, RS485

Several UPS have RS232 and/or RS485 with JBUS/MODBUS protocol embedded.

Should the UPS need an isolated RS485 port, an additional interface card can be used.

- The serial connection interface makes it possible to communicate with BMS systems (Building Management Systems) using JBUS/MODBUS or PROFIBUS protocols (on request).
- All UPS information can be remotely accessed:
  - status, measurements (V, A, kVA, °C…) alarms, controls.

LOGIC 022 A

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