NETYS RT

Single-phase UPS rack/tower
from 1 to 10 kVA

The solution for

- Data centre
- Healthcare Facilities
- Infrastructure & Transport
- Industry
- Buildings

Strong points

- Best-in-class design
- Optimum battery management
- Up to 5-year warranty
- Simple installation whithin any operating environment
- Ease of use
- IoT and cybersecurity

Compliance with standards

- IEC 62040-1
- IEC 62040-2
- IEC 62040-3 *(efficiency tested)*
- AS 62040.1.1
- AS 62040.1.2
- AS 62040.2
- RCM (E2376)

Certifications and attestations

Function

NETYS RT is the fourth generation of single-phase rack-tower UPS, ensuring the protection and availability of IT infrastructure that meets the demands of both power reliability and installation flexibility.

Advantages

Best-in-class design
- True 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.
- Wide tolerance of the input voltage reduces switchovers to battery mode, prolonging battery life.
- Potential for N+1 parallel and redundant configuration to maximise the availability of critical utilities (up to 30 kVA).
- Li-ion battery option for greater compactness and reduced maintenance.
- Robust coated versions for highly demanding applications.
- Performance tested and verified by third party independent laboratory.
- Wide operating ambient temperature up to 45°C.

Up to 5-year warranty
- Lead-acid battery: 2-year UPS warranty, with the option of a 3-year extension.
- Lithium-ion battery: 3-year UPS warranty with the option of a 2-year extension. The battery is also covered by the warranty if the UPS is connected to Socomec's cloud.
- In the event of failure, a replacement product will be sent to site within 48 hours (Europe). You will have 1 month to return the faulty product to Socomec.

Ease of use
- Multi-language LCD display.
- Large LED status bar.
- Load segmentation function to prioritise loads and manage critical situations.
- Wide range of communication protocols for integration into LAN networks or Building Management Systems.

Optimum battery management
- Lead-acid and Li-ion battery technology management.
- Hot-swap modular battery extension (EBM) to meet all back-up time requirements - even after installation.
- Battery ageing detection function.
- Fast recharge – even for very long back-up time.

IoT and cybersecurity
- Potential to add Net Vision network card for a direct and secure connection between the UPS and the Ethernet network, and for access to a full panel of digital services such as the SoLive remote monitoring app.
- Conformance to the cybersecurity guidelines of ISO/IEC 62443-4-2 standard.
- Cybersecurity test certified by a third party company.

Simple installation within any operating environment
- Quick and simple installation: no configuration necessary on first start up, avoiding risk of human error.
- Full set of accessories for easy and safe installation.
- Easy switch from rack to tower mode will suit most environments - even with limited space and specific needs.
- Compact footprint in tower mode.
- High density module saving valuable cabinet rack space.

General characteristics

- Rack/Tower convertible.
- Embedded dry-contact interface.
- Input/Output cables (1000-3000 VA).
- Rail kit and rack ears.
- USB cable.
- Tower stands.
- Cable lockers.
- Connection for battery extension modules.
- Port for parallel operation (5000 - 10000 VA).
- Internal temperature sensor.
- Power off the UPS remotely.
- Cold start.
- Auto and Manual battery test.

Electrical options

- UPS models with tropicalised (Conformal Coating) boards.
- Hot-swap battery extension modules.
- External Manual By-pass.
- Longer battery cable, 1 side free for special cabinets.

Standard communication features

- 1 slot for communication options.
- USB port for UPS management.
- MODBUS RTU (RS232).
- RS485 for Li-ion Offer (BMS).
- LOCAL VIEW software for local UPS monitoring and shutdown for Windows, Linux and MAC Osx.

Communication options

- Dry-contact card.
- NET VISION Card or NET VISION Box: professional WEB/SNMP, ethernet interface for UPS monitoring and remote automatic shutdown (MODBUS TCP).
- Environmental Monitoring Device (EMD).
- REMOTE VIEW PRO supervision software.

Remote monitoring and cloud services

- SoLive UPS: free mobile app enabling UPS systems to be monitored from a smartphone, anywhere, anytime.

Technical data

NETYS RT										
Model	NRT4-U010B	NRT4-U015B	NRT4-U020B	NRT4-U030B	NRT4-050K	NRT4-060K	NRT4-080K	NRT4-100K	NRT4-108K	NRT4-110K
Sn	1000 VA	1500 VA	2000 VA	3000 VA	5000 VA	6000 VA	8500 VA	10,000 VA	8500 VA	10,000 VA
Pn	1000 W	1500 W	2000 W	3000 W	5000 W	6000 W	8500 W	10,000 W	8500 W	10,000 W
Architecture	Online duble conversion VFI with input PFC and automatic bypass									
Parallel redundant function	-				Up to 3					
Input/output	1/1								1/1 o 3/1	
INPUT										
Voltage	230 V 1/1 110 V ÷ 300 V ; (160 V÷ 300 V @100% load)				230 V 1/1 110V ÷ 276V; (160 V ÷ 276 V @100% load				230 V 1/1 or 400 V 3/1 110 V ÷ 276 V; (160 V÷ 276 V @100% load)	
Frequency	40/70 Hz (50/60 Hz +/-10% auto-selectable)									
Power Factor	> 0.99									
Surge Protection	296 J								405 J L1-L2-L3 445 J L1/L2/L3 - PE	
Input socket	10 A IEC 320-C14		16 A IEC 320-C20		Teminals block					
OUTPUT										
Voltage	230 V (1 ph) selectable 200/208/220/230/240 V ±1% (derating 10% a 208 V/20% a 200 V)									
Efficiency	Up to 94.1% online mode				Up to 95.6% online mode					
Overload capability	Up to 105% continuously; 125% x 5 min.; 150% x 30 sec; > 150% 500 ms				Up to 105% continuously; 125% x 10 min.; 150% x 30 sec; > 150% 500 ms					
Output connections	1 main group (4x IEC C13) 1 programmable group (4x IEC C13)		1 main group (1x IEC C19 + 4x IEC C13) 1 programmable group (4x IEC C13)		Terminals block					
BATTERY										
Standard autonomy [1]	15	9	16	10	13	10	14	11	14	11
Voltage	36 VDC		72 VDC		192 VDC		240 VDC			
Type	Sealed lead-acid maintenance free - expected life 3 / 5 years									
COMMUNICATION										
Mimic panel	LCD with menu available in 11 languages									
RS232 MODBUS protocol	•	•	•	•	•	•	•	•	•	•
USB port	•	•	•	•	•	•	•	•	•	•
WEB/SNMP	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option
COMM slot	•	•	•	•	•	•	•	•	•	•
Dry contacts	•	•	•	•	•	•	•	•	•	•
EPO input	•	•	•	•	•	•	•	•	•	•
Parallel port	-	-	-	-	•	•	•	•	•	•
STANDARDS										
Safety	IEC/EN 62040-1, AS 62040.1.1, AS 62040.1.2									
EMC	IEC/EN 62040-2, AS 62040.2									
Performance	IEC/EN 62040-3 (efficiency tested by an external independent body)									
Product declaration	CE, RCM, UKCA, CMIM									

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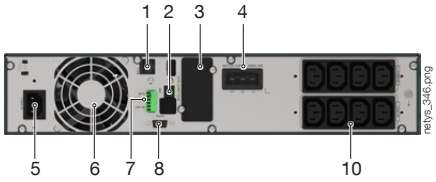
Technical data

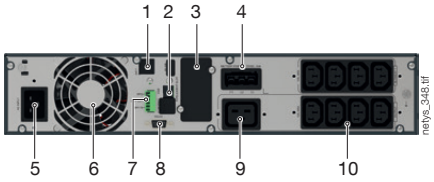
ENVIRONMENT										
Operating ambient temperature	From 0° C to +45° C [2]				From 0° C to +45° C					
Relative Humidity	0 to 95% (non-condensing)									
Noise level (ISO 3746)	< 45 dB		< 50 dB				< 55 dB			
UPS CABINET										
UPS size std mm (W x D x H)	438 x 445 x 85.5	438 x 445 x 85.5	438 x 600 x 85.5	438 x 600 x 85.5	438 x 570 x 86.3	438 x 570 x 86.3	438 x 570 x 86.3	438 x 570 x 86.3	438 x 570 x 86.3	438 x 570 x 86.3
UPS size RACK	2U	2U	2U	2U	2U	2U	2U	2U	2U	2U
UPS weight std (kg)	15.5	15.7	25.6	26.1	13.7	13.7	15.2	15.3	15.8	15.8
IP rating	IP20									
EXTERNAL BATTERY MODULE (EBM)										
EBM size mm (W x D x H)	438 x 445 x 85.5	438 x 445 x 85.5	438 x 600 x 85.5	438 x 600 x 85.5	438 x 600 x 85.5	438 x 600 x 85.5	438 x 590 x 129	438 x 590 x 129	438 x 590 x 129	438 x 590 x 129
EBM RACK	2U	2U	2U	2U	2U	2U	3U	3U	3U	3U
EBM weight (kg)	22.3 kg	22.3 kg	39.8 kg	39.8 kg	40.8 kg	40.8 kg	60 Kg	60 Kg	60 Kg	60 Kg
KIT MODEL (UPS + EBM)										
EBM size mm (W x D x H)	-				438 x 600 x 171.8	438 x 600 x 171.8	438 x 590 x 215.3	438 x 590 x 215.3	438 x 590 x 215.3	438 x 590 x 215.3
EBM RACK	-				2U+2U	2U+2U	2U+3U	2U+3U	2U+3U	2U+3U
EBM weight (kg)	-				13.7 + 40.8	13.7 + 40.8	15.2 + 60	15.3 + 60	15.8 + 60	15.8 + 60

(1) Typical: @75% of rated load PF 0.7. (2) Conditions apply.

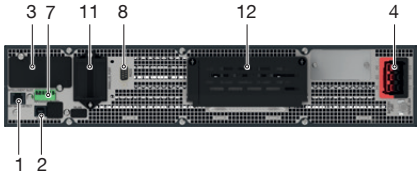
Connections



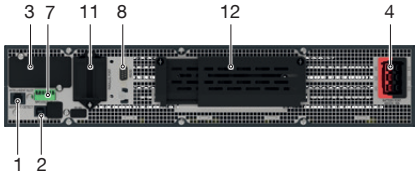
1 - 1.5 kVA



2 - 3 kVA



5 - 6 kVA

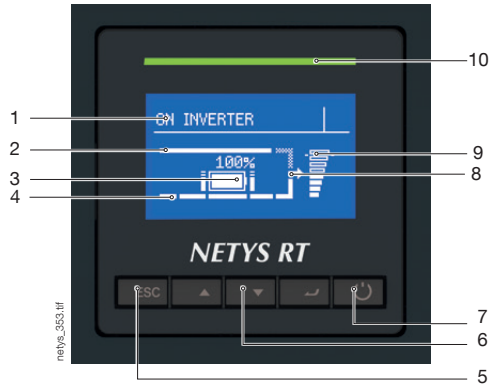


8.5 - 10 kVA

1. RJ50 (for EBM detect /RT MBP detect)
2. USB port
3. Slot for optional communication boards
4. Connector for external battery extension
5. Mains input socket [1]
6. Fan
7. Dry contact interface
8. RS232 interface (MODBUS protocol)
9. Output socket (full power)
10. Output sockets (IEC 320 - 10 A)
11. Parallel slot
12. AC Input /Output port (Terminal Block)

(1) 1-1.5 kVA IEC 320 10 A - 2-3 kVA IEC 320 16 A

Control panel



1. UPS status
2. Bypass input
3. Battery status
4. Main input
5. Exit button
6. Navigator button
7. On/off button
8. Output
9. Load status
10. Led bar

NETYS RT - Li-Ion battery UPS

The Li-Ion Battery solution, available for NETYS RT 1-3 kVA, provides higher back-up power density and much longer battery life than traditional lead-acid batteries. The Li-Ion Battery solution is equipped with an embedded interactive BMS (Battery Monitoring System) that provides accurate and individual cell monitoring and coordinates the recharging profile with the UPS to maximise the back-up power availability.

Compact and lightweight

- Lithium-ion batteries weigh much less than their VRLA counterparts, typically being between 40% and 60% lighter. Thanks to their higher energy density and resulting compactness, they are also easier to install - especially in spaced-constrained environments.

Faster to recharge

- Lithium-ion batteries will recharge in just 4 – 5 hours, while VRLA batteries can take over 12 hours. This enables much quicker recovery after discharge, which is crucial in applications requiring continuous uptime.

Higher resiliency

- Lithium-ion batteries allow up to 10 times more charge/discharge cycles compared to VRLA batteries. They also have a wide operating temperature range without sacrificing performance.
- Lithium-ion UPS with tropicalised boards as a standard.

Longer lifespan

- Lithium-ion batteries have a significantly longer lifespan than VRLA batteries - around 2 or 3 times on average. This means fewer or even zero replacements during the lifetime of the UPS and consequently lower maintenance costs.

Up to 5-year warranty

- Lithium-ion battery: 3-year UPS warranty with the option of a 2-year extension. The battery is also covered by the warranty if the UPS is connected to Socomec's cloud.
- In the event of failure, a replacement product will be sent to site within 48 hours (Europe). You will have 1 month to return the faulty product to Socomec.

Technical data

	NETYS RT		
Model	NRT4-Li-U010B	NRT4-Li-U020B	NRT4-Li-U030B
Sn	1000 VA	2000 VA	3000 VA
Pn	1000 W	2000 W	3000 W
Architecture	Online double conversion VFI with input PFC and automatic bypass		
Input socket	1/1		
INPUT			
Voltage	230 V 1/1 110 V ÷ 300 V; (160 V ÷ 300V @100% load)		
Frequency	40/70 Hz (50/60 Hz +/-10% Auto-Selectable)		
Power Factor	> 0.99		
Surge Protection	296J		
Input socket	IEC 320-C14 (10 A)	IEC 320-C20 (16 A)	
OUTPUT			
Voltage	230 V (1ph) selectable 200/208/220/230/240 V ±1% (derating 10% @208 V / 20% @200 V)		
Efficiency	Up to 94.1% online mode		
Overload capability	Up to 105% continuously; 125% x 5 min; 150% x 30 sec		
Output connections	1 main group (4x IEC C13) 1 prog. group (4 x IEC C13)		1 main group (1x IEC C19 + 4x IEC C13) 1 prog. group (4x IEC C13)
BATTERY			
Type	Lithium Battery, LiFePO4		
Standard autonomy (1)	36 min	29 min	19 min
Voltage	48 VDC	76.8 VDC	
Recharge time	3.5 hours	4.5 hours	
COMMUNICATION			
Mimic panel	LCD with menu available in 11 languages		
RS232 MODBUS protocol	•	•	•
USB port	•	•	•
WEB/SNMP (Ethernet RJ45 port)	Option	Option	Option
COMM slot	•	•	•
Dry contacts	•	•	•
EPO input	•	•	•
STANDARDS			
Safety	IEC/EN 62040-1; AS62040.1; IEC62619:2022; UN38.3		
EMC	IEC/EN 62040-2; AS 62040.2		
Performance	IEC/EN 62040-3 (efficiency tested by an external independent body)		
Product declaration	CE, RCM, UKCA, CMIM		
ENVIRONMENT			
Operating ambient temperature	From 0 °C to +45 °C (2)		
Relative Humidity	0-95% non-condensing		
Noise level (ISO 3746)	< 45 dBA	< 50 dBA	
UPS CABINET			
UPS size std (W x D x H)	438 x 445 x 85.5	438 x 600 x 85.5	438 x 600 x 85.5
UPS size RACK	2U	2U	2U
UPS weight std	15.1	21.3	21.3
IP rating	IP20		
EXTERNAL BATTERY MODULE (EBM)			
EBM size mm (W x D x H)	438 x 445 x 43	438 x 600 x 43	
EBM RACK	1U	1U	
EBM weight (kg)	12 Kg	17.4 Kg	

(1) Typical: @75% of rated load PF 0.7. (2) Conditions apply.