NETYS RT

Total protection on rack or tower
from 1100 to 11000 VA

The solution for

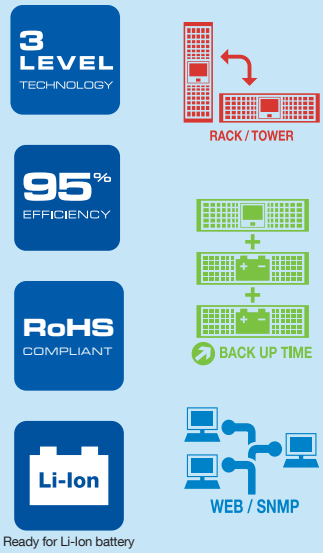
- Servers and networking devices
- VoIP communication systems
- Structured cabling systems
- Video surveillance systems
- Control systems
- Switching
- Edge data centres

Compliance with standards

- IEC 62040-1
- IEC 62040-2
- IEC 62040-3

Certifications and attestations

Advantages



Ready for Li-Ion battery

Simple to install

- No configuration necessary on first startup.
- Space and time saving 'tower-to-rack' conversion mode.
- Compact footprint (tower mode).
- High density rack enclosure saving valuable cabinet rack space.

High protection and availability

- 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.
- Possibility of 1+1 parallel and redundant configuration to maximise the availability of critical utilities (up to 22 kVA).
- Hot-swap plug-in manual bypass.

Certified performance

- Performance tested and verified by independent laboratory.
- Full performance up to 40 °C without derating.

Easy to use

- Clear and uncluttered multilanguage LCD display.
- Wide range of communication protocols for integration into LAN networks or Building Management Systems.
- IoT ready device for access to connected services.
- Load segmentation function to prioritize loads and manage critical situations.

Extended and flexible back-up time

- 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.
- Li-Ion battery technology-ready.

System features

- Rail kit.
- Embedded dry-contact interface (5-11 kVA).
- Input mains switch breaker (5-11 kVA).
- Connection for battery extension modules.
- Port for parallel operation (5-11 kVA).
- Power off the UPS remotely.
- Internal temperature sensor.

System options

- UPS models with tropicalised (Conformal Coating) boards.
- Hot-swap battery extension modules.
- Hot-swap manual bypass.
- 1+1 parallel module (5-11 kVA).

Standard communication features

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

Communication options

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

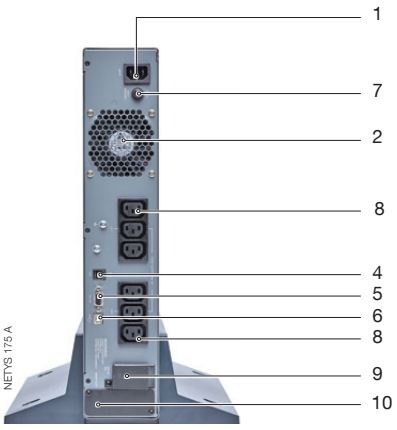
Technical data

	NETYS RT							
Model	NRT2-U1100	NRT2-U1700	NRT2-U2200	NRT2-U3300	NRT3-5000K	NRT3-7000K	NRT3-9000K	NRT3-11000K
Sn	1100 VA	1700 VA	2200 VA	3300 VA	5000 VA	7000 VA	9000 VA	11000 VA
Pn	900 W	1350 W	1800 W	2700 W	5000 W	6000 W	8000 W	10000 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) 120÷280 V; (175÷280 V @100% load)				230 V (1ph) 100÷280 V; (175÷280 V @100% load)			
Frequency	50/60 Hz +/-10% (Auto-Selectable)				40/70 Hz (50/60 Hz +/-10% Auto-Selectable)			
Power factor / THDi	>0.99 / <5%				>0.99 / <3%			
Input socket	IEC 320-C14 (10 A)	IEC 320-C20 (16 A)			terminals			
OUTPUT								
Voltage	230 V (1ph) selectable 200 / 208 / 220 / 240 V - 50 or 60 Hz ± 2% (± 0.05 Hz in battery mode)							
Power factor	0.9 @ 1 kVA	0.9 @ 1.5 kVA	0.9 @ 2 kVA	0.9 @ 3 kVA	1 @ 5 kVA	1 @ 6 kVA	1 @ 8 kVA	1 @ 10 kVA
Efficiency	up to 93% online mode				up to 95,5% online mode			
Overload capability	up to 105% continuously; 125% x 3 min; 150% x 30 sec				up to 105% continuously; 125% x 2 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-C19 (16 A)			terminals			
BATTERY								
Standard autonomy[1]	7	11	8	9	13	8	12	9
Voltage	24 VDC	48 VDC	48 VDC	72 VDC	192 VDC	192 VDC	240 VDC	240 VDC
Recharge time	< 3 hr to recover 90% capacity				< 6 hr to recover 90% capacity			
COMMUNICATION								
Mimic panel	LCD with graphical icons				LCD with menu available in 10 languages			
RS232 MODBUS protocol	•	•	•	•	•	•	•	•
USB port	•	•	•	•	•	•	•	•
WEB/SNMP (Ethernet RJ45 port)	option	option	option	option	option	option	option	option
COMM slot	•	•	•	•	•	•	•	•
Dry contacts	option	option	option	option	•	•	•	•
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[2]	CE, RCM (E2376), UKCA							
ENVIRONMENT								
Operating ambient temperature	from 0 °C to +40 °C (up to 45 °C [3])							
Storage temperature range	from -15 °C to +55 °C (from 15 °C to 25 °C for best battery life)							
Relative Humidity	5-95% non-condensing							
Noise level (ISO 3746)	< 45 dBA	< 50 dBA			< 55 dBA			
UPS CABINET								
UPS size std (W x D x H)	89x332x440 mm	89x430x440 mm	89x430x440 mm	89x608x440 mm	178x565x440 mm	178x565x440 mm	220x650x440 mm	220x650x440 mm
UPS size RACK	2U	2U	2U	2U	2U+2U	2U+2U	2U+3U	2U+3U
UPS weight std	13 kg	18 kg	19 kg	30 kg	11 + 39 kg	12 + 39 kg	16 + 67 kg	17 + 67 kg
IP rating	IP20							
EXTERNAL BATTERY MODULE (EBM)								
EBM size (W x D x H)	89x332x440 mm	89x430x440 mm	89x430x440 mm	89x608x440 mm	89x565x440 mm	89x565x440 mm	131x650x440 mm	131x650x440 mm
EBM RACK	2U	2U	2U	2U	2U	2U	3U	3U
EBM weight	16 kg	29 kg	29 kg	43 kg	39 kg	39 kg	67 kg	67 kg

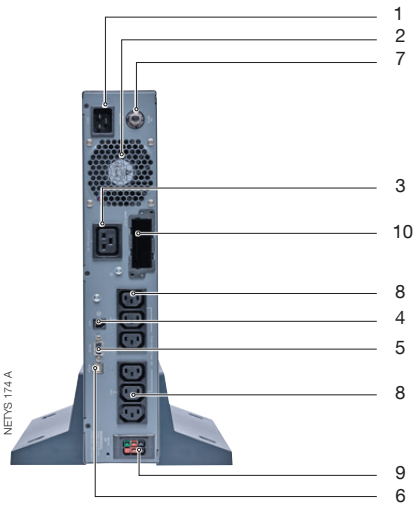
(1) @75% of rated load PF 0.7. (2) BIS compliance for 5000 VA and 7000 VA models. (3) Conditions apply.

NETYS RT
Single-phase UPS
from 1100 to 11000 VA

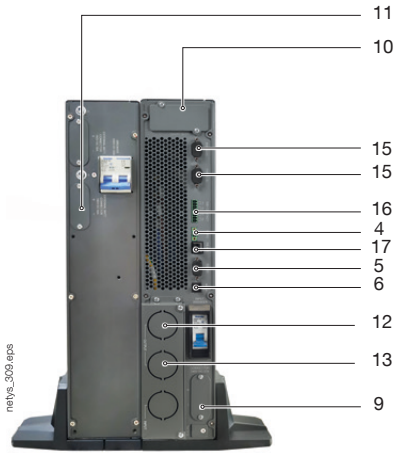
Connections



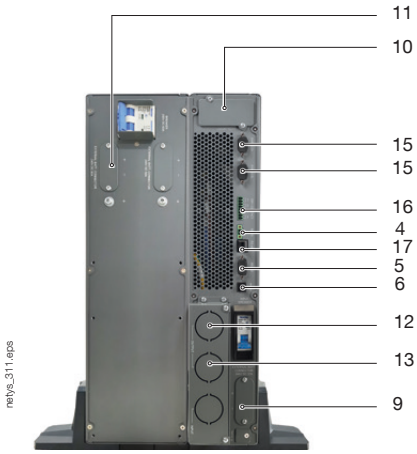
1100 VA



1700 VA - 2200 VA - 3300 VA



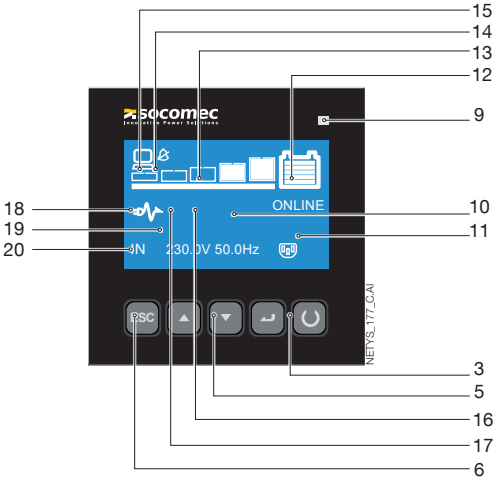
5000 VA - 7000 VA + battery



9000 VA - 11000 VA + battery

1. Mains input socket (IEC 320)
2. Fan
3. Output socket (full power)
4. Input to power off the UPS remotely
5. RS232 interface (MODBUS protocol)
6. USB port
7. Input protection
8. Output sockets (IEC 320 - 10 A)
9. Connector for external battery extension
10. Slot for optional communication boards
11. Battery extension connector
12. Output terminals
13. Input terminals
14. Input switch
15. Parallel port connector
16. Dry contact interface
17. RS485 for Li-ion battery BMS

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. Navigator button
7. Alphanumeric LCD display
8. Green LED lit. Status of the load
9. Load status
10. Configuration
11. Programmable outlets
12. Battery status
13. Load level (5 steps)
14. Buzzer off
15. Load present
16. Battery fault / Replace the battery
17. General alarm
18. Overload
19. Input and output values
20. Normal mode / Battery mode (flashing)

NETYS RT Hot-Swap

NETYS RT hot-swap models: 7000 VA (4U rack) and 11000 VA (5U rack).

The plug-in manual bypass, available for NETYS RT hot-swap models, allows the easy replacement of the UPS without powering down critical systems during maintenance operations.

Power Distribution Unit with 10 A and 16 A IEC multiple sockets. Load segment control function to prioritise the supply of the most critical loads.

Front access hot-swap battery pack for a safe and fast replacement.

NETYS RT Hot-Swap		
Model	NRT3-7000 MBP	NRT3-11000 MBP
Sn	7000 VA	11000 VA
Pn	6000 W	10000 W
Plug-in manual baypass	•	•
Hot-swap battery packs	•	•
UPS size (W x D x H)	178x665x440 mm	220x750x440 mm
UPS size RACK	4U	5U
UPS weight	54 kg	85 kg

NETYS RT - Li-Ion battery UPS

The Li-Ion Battery solution, available for NETYS RT 5-11 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.