# LEONARDO

from 6 kVA —— to 10 kVA

## High-power on-line

1-phase UPS with Rack/Tower convertible design, ideal for networks and servers, small data centres.



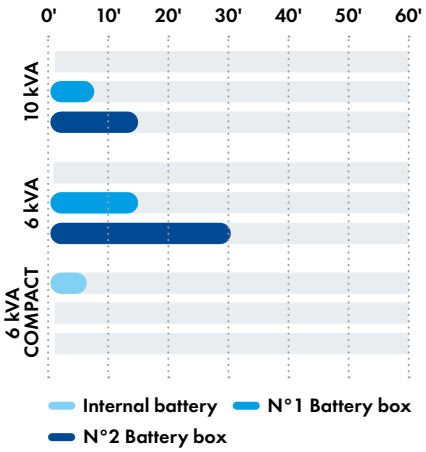
### Features and benefits

- On-line double conversion UPS from 6 to 10 kVA, Tower and 2U or 3U Rack/Tower.
- Parallel redundant configuration maximizing the availability.
- Rack/Tower convertible design to protect your investment when migrating from tower to rack-mount environment. Both UPS and display panel can be rotated.
- Easy installation and set up, user replaceable and upgradable battery.
- Intuitive LCD display providing easy-to-read UPS status and power information.
- Audible alarm alerts upon utility power and UPS status change.
- Smart cooling system ensuring further energy savings.
- Active harmonic power quality control ensuring 0.99 input PF and THDi<3% for maximum compatibility with sources.
- Automatic self test and advanced battery management maximizing battery performance and extending battery life.
- Remote emergency power off to guarantee your piece of mind in critical applications.
- Internal manual bypass for safe and easy maintenance.
- RS232 communication port providing UPS management.
- Two slots auto-sensing communication cards.
- Cold start for powering loads when mains are not available.
- Borri Power Guardian user-friendly UPS management software with alerts upon main power failures and system shutdown notification via SMS and email, free downloadable at www.borri.it/download (for more info see p.20/21).

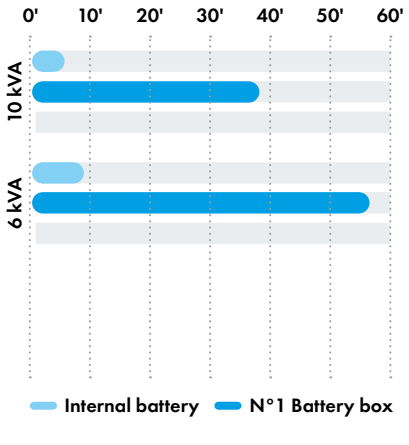
### Main options

- SNMP card to send UPS status to BMS's by Ethernet connection and SNMP or ModBus over IP protocol to monitor UPS status by any internet browser from workstations and to receive SMS or e-mail alerts from the UPS on any portable device.
- Contact relay card to send UPS status to PLC's, SCADA's or AS400's by voltage free SPDT contacts.
- Battery extension box allowing additional autonomy time to be quickly added.
- Additional battery charger for external battery box.
- Parallel kit.
- Rail kit Rack/Tower.
- Rack PDU with external sockets and manual bypass switch.

Back up time for **Rack/Tower UPS**




Back up time for **Tower UPS**



## LEONARDO technical data

| UPS Type | | T * | T * | RT (2U) *** | RT (4U) ** | RT (3U) *** |
|---|---|---|---|---|---|---|
| **Rating (kVA)** | | **6** | **10** | **6** | **6** | **10** |
| **Nominal Power (kW)** | | **5.4** | **9** | **5.4** | **5.4** | **9** |
| UPS dimensions WxDxH (mm) | | 290x645x748 | 290x645x748 | 440x680x88 | 440x680x176 | 440x680x132 |
| UPS weight (kg) | | 86 | 96 | 24 | 52 | 26 |
| **Input** | | | | | | |
| Connection type | | Hardwired 2w (rectifier), 2w (bypass) | | Hardwired 2w | | |
| Nominal voltage | | 230 Vac 1-phase | | | | |
| Voltage range | | 160 to 280 Vac | | | | |
| Frequency and range | | 50/60 Hz, 45 to 65 Hz | | | | |
| Power factor | | 0.99 | | | | |
| Current distortion (THDi) | | <6% | | | | |
| **Output** | | | | | | |
| Connection type | | Hardwired 2w | | | | |
| Nominal voltage | | 230 Vac +/-1% 1-phase | | | | |
| Frequency | | 50/60 Hz | | | | |
| Power factor | | Up to 0.9, without power derating | | | | |
| Overload capability | | 104% continuous, 150% for 160 seconds, >150% transfer to bypass | | | | |
| Mode of operation | | On-line, Eco mode | | | | |
| Classification by IEC/EN 62040-3 | | VFI-SS-11 | | | | |
| **Battery** | | | | | | |
| Autonomy time internal battery (min.) ◊ | 50% load | 25 | 17 | external battery | 15 | external battery |
| | 100% load | 9 | 6 | external battery | 6 | external battery |
| **Connectivity and function extensions** | | | | | | |
| Front panel | | Display LCD, status LED, function keys | | | | |
| Communication | | **Included:** USB, RS232 card, EPO.<br>**Optional:** dry contact card, SNMP card, RS485 card.<br>**Compatible platforms:** Windows, Linux, Mac | | | | |
| **Environmental** | | | | | | |
| Operating temperature range | | 0°C to +40°C | | | | |
| Altitude (AMSL) | | < 1000 m without power reduction, > 1000 m with reduction of 0.5% per 100 m | | | | |
| Audible noise at 1 m (dBA) | | < 50 | | | | |
| **Standards and certifications** | | | | | | |
| Quality assurance, environment, health and safety | | ISO 9001:2015, ISO 14001:2015, BS OHSAS 18001:2007 | | | | |
| Safety | | IEC/EN 62040-1 | | | | |
| EMC | | IEC/EN 62040-2 | | | | |
| Marking | | CE | | | | |

*Tower with internal battery **Rack/Tower with internal battery ***Rack/Tower without internal battery
◊ Measurement conditions: optimised parameters, fully charged battery, 0.7 PF



LEONARDO **T 6/10 kVA**



LEONARDO **RT (4U) 6 kVA**



LEONARDO **RT (3U) 10 kVA**



LEONARDO **RT (2U) 6 kVA**