

Single phase UPS

1ph from 450 VA to 10kVA



Applications

- Home Office
- Computers and peripherals
- Networks and servers
- Small and medium data centers

Highlights

- User-friendly and Plug and Play
- Compact and noiseless
- Intuitive LCD display
- Rack/Tower convertible design
- Parallel redundant configuration



LEONARDO

1ph from 6 to 10 kVA

On-line UPS
for networks and servers,
small and medium
data centers



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 upstream sources.
- Automatic self test and advanced battery management maximizing battery performance and extending battery life.
- Battery extension box allowing additional autonomy time to be quickly added.

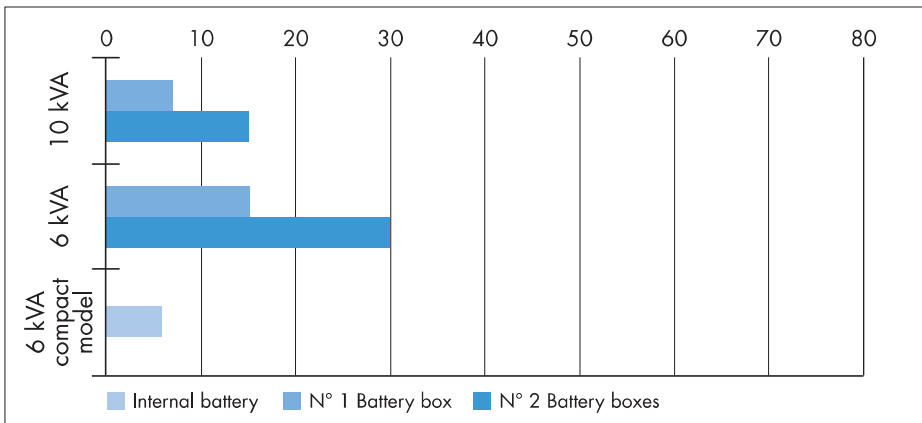
- Remote emergency power off to guarantee your piece of mind in critical applications.
- Internal manual bypass for safe and easy maintenance.
- RS232 communication port providing UPS management.
- Two slots auto-sensing communication cards.
- Cold start for powering loads when mains are not available.
- Borri Power Guardian user-friendly UPS management software with alerts upon main power failures and system shutdown notification via SMS and email (for more info see p.10), free downloadable at www.borri.it/download.

Main options

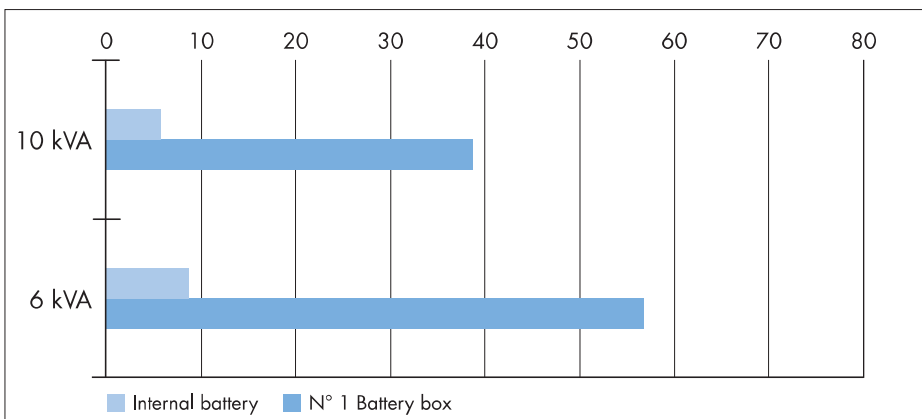
- SNMP card to send UPS status to BMS's by Ethernet connection and SNMP or ModBus over IP protocol to monitor UPS status by any internet browser from workstations and to receive SMS or e-mail alerts from the UPS on any portable device.
- Contact relay card to send UPS status to PLC's, SCADA's or AS400's by voltage free SPDT contacts.
- Additional battery charger for external battery box (for more info visit www.borri.it).
- Parallel kit.
- Rail kit Rack/Tower.
- Rack PDU with external sockets and manual bypass switch.



Autonomy time in minutes for Rack/Tower UPS



Autonomy time in minutes 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 (input), 2w (bypass)	Hardwired 2w (input)
Nominal voltage	230 Vac single 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% single phase	
Frequency	50/60 Hz	
Power factor	Any power factor up to 0.9 lagging or leading without power derating	
Overload capability	104% continuous, 150% for 160 seconds, >150% transfer to bypass	
Mode of operation	On-line, Eco-mode	

Battery

Autonomy with 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, LED signaling, function keys
Communication	Included: RS232 card, EPO. Optional: dry contact card, SNMP card, RS485 card, USB card. 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 1m (dBA)	<50

Standards and certifications

Quality assurance, Environment, Health and Safety	ISO 9001:2008, ISO 14001:2004, 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, battery full charged, cos Ø 0.7



LEONARDO T 6/10 kVA



LEONARDO RT(4U) 6 kVA



LEONARDO RT(2U) 6 kVA



LEONARDO RT(3U) 10 kVA