

UNINTERRUPTIBLE POWER SUPPLY

WRT

POWER RANGE
1-3 kVA

SINGLE-PHASE INPUT AND OUTPUT
1:1

Compact and convertible rack or tower solution, highly reliable and available in three power levels. Ideal for full protection of critical equipment in small-scale systems. Maximum efficiency and guaranteed service continuity. Expandable backup time through the connection of external battery modules.

- ✓ **Output power factor 1.0**
- ✓ **Versatile installation**
- ✓ **Expandable backup time**
- ✓ **Double Conversion Online technology**
- ✓ **Filtered input voltage with power factor correction**
- ✓ **Hot Swap battery technology for easy maintenance**



POWER RANGE 1-3 kVA

With cutting-edge technology and a compact, elegant design, the WRT range stands out from other solutions on the market for its efficiency and quality.

- Communications
- Security
- Retail
- Office

*Convertible LCD,
with intuitive
navigation*



MAIN FEATURES

- Rack or tower installation (convertible)
- Double Conversion Online technology with pure sine wave output
- Filtered input voltage with Active Power Factor Correction (APFC) and input THDI $\leq 5\%$
- Input power factor up to 0.99
- Output power factor 1.0
- Expandable backup time (external battery module connection)
- Hot Swap battery technology for easy maintenance
- Full digital control via DSP microprocessor
- Cold Start technology
- Advanced Battery Management System (ABM) with intelligent management, automatic equalization and float charging, improving charger reliability and extending battery lifespan
- Adjustable load transfer time, compatible with generator operation
- Intuitive and user-friendly LCD display
- Selectable output voltage adjustable via the LCD panel
- Advanced multi-platform communication ports for UPS monitoring and management
- Emergency Power Off (EPO)
- Self-regulating cooling fans based on load and temperature
- Communication ports: RS232 / RS485 / USB / Dry Contacts / SNMP (optional)
- Protection against short circuit, overloads, undervoltage, and overvoltage



Online
Double Conversion



90°
Rotatable Panel



Flexible
Rack / Tower



Expandable
Runtime Extensions

COMMUNICATION / MANAGEMENT



Front panel (LCD)

Displays vital UPS operating information and allows control of key functions.



User-Friendly Communication and Management Software

Provides real-time information on electrical and operational parameters. Enables viewing and export of logs and events, as well as historical incident records.

Allows automatic shutdown of protected equipment.

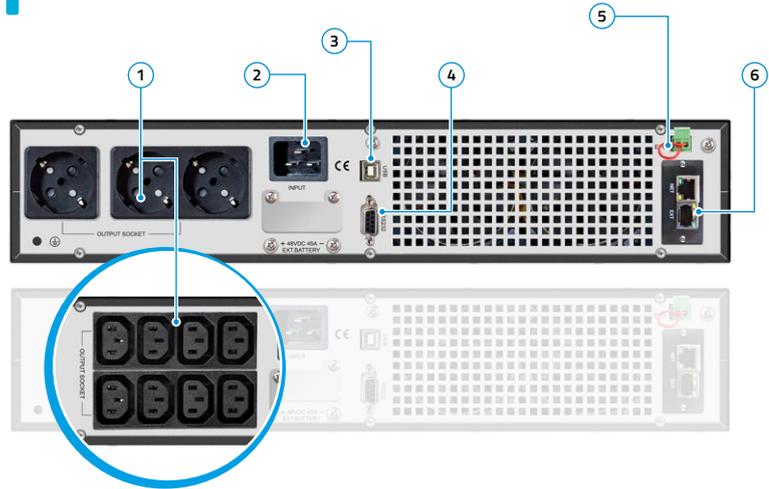
Remote management of main functions.



Communication Module

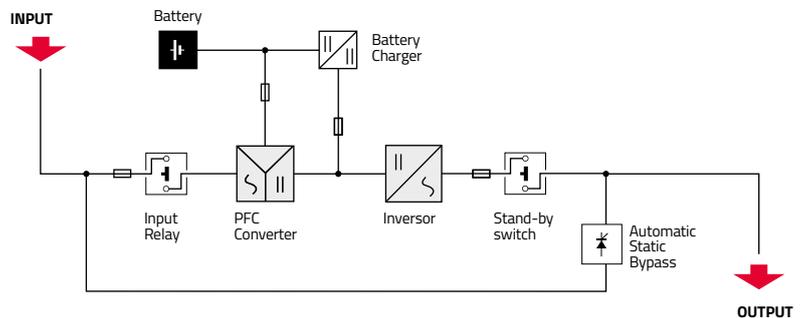
When properly configured, the software automatically shuts down PCs and servers protected by the UPS.

REAR PANEL VIEW



1. Output Sockets (Schuko / IEC)
2. Input Power Supply
3. USB Port
4. RS232 Serial Port
5. EPO (Emergency Power OFF)
6. Communication Board (optional)

OPERATING DIAGRAM



MODEL	WRT 1k	WRT 2k	WRT 3k
POWER	1000VA / 1000W	2000VA / 2000W	3000VA / 3000W

INPUT

Nominal Voltage	230V ±10%, Single-Phase (1Φ + N + PE)		
Nominal Frequency	50/60Hz ±5% (auto-detection)		
Voltage Range	110 ~ 176 Vac (linear power reduction between 50% and 100% load); 176 ~ 280 Vac (no reduction); 280 ~ 300 Vac (50% power reduction)		
Power Factor	≥0.99		
Total Harmonic Distortion (THDi)	<5%		
Bypass Voltage Range	-40% ~ +20% (selectable)		
Input Connection	IEC320 socket		

OUTPUT

Nominal Voltage	208/220/230/240Vac (selectable via LCD)		
Voltage Precision	±1%		
Frequency	50Hz/60Hz in normal mode; 50Hz/60Hz ±0.1Hz in battery mode		
Waveform	Pure Sine Wave		
Power Factor	1.0		
Crest Factor	3:1		
Total Harmonic Distortion (THDv)	≤2% linear load / ≤5% non-linear load		
Inverter Overload Capacity	105% ~ 110%: Transfer to bypass in 30 min 110% ~ 130%: Transfer to bypass in 10 min 130% ~ 150%: Transfer to bypass in 30 s 150%: Transfer to bypass in 500 ms		
Efficiency	≥98,5% in ECO mode; ≥94,5% in Normal mode	≥99% in ECO mode; ≥95,5% in Normal mode	
Output Connection	Schuko or IEC C13 sockets		

BATTERIES

Type	12V/9Ah, VRLA maintenance-free		
Internal Batteries	2 x 9Ah	4 x 9Ah	6 x 9Ah
Typical Backup Time	10 minutes		
Backup Time Expansion	Enabled through connection of external battery modules		
Typical Recharge Time	90% capacity recovery within 3 hours for typical backup time		

SYSTEM AND COMMUNICATIONS

Display	LCD + LED		
Alarms and Protection	Short circuit, power failure, battery mode, low battery voltage, fan failure, overload		
Interfaces	EPO / RS232 / USB / RS485 (optional) / dry contact card (optional) / SNMP card (optional)		

PHYSICAL AND ENVIRONMENTAL CONDITIONS

Dimensions (WxDxH) (mm)	440 x 338 x 88 (2U)	440 x 430 x 88 (2U)	440 x 560 x 88 (2U)
Weight (kg)	11	21	26
Operating Temperature	0 ~ 40°C		
Relative Humidity	0 - 95% (non-condensing)		
Noise Level	≤50dB (1m)		
Protection Level	IP20		
Standards	European Directives: LVD 2014/35/UE EMC 2014/30/EU EN IEC 62040-1 EN IEC 62040-2 EN IEC 62040-3 (VFI SS 111)		