



Smart plus is the new generation of small to medium power transformer-less UPS in tower or rack form.

This model offers unity power factor and is an ideal Solution for small computer centers, servers and for industrial applications.



Medical equipment



Shops



Small offices



Sensitive IT loads



Telecom



Critical buildings



Alarm & security systems



Small/medium data center

# Smart Plus RT Online UPS

Single Phase  
Uninterruptible Power Supply

1KVA ~ 10KVA

[www.itapower.it](http://www.itapower.it)

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Power Supply

1KVA ~ 10KVA



## highlights

- True double-conversion
- Output power factor 1
- High efficiency up to 94%
- Hot swappable battery design
- 50Hz/60Hz frequency converter mode
- Emergency power off function (EPO)
- Adjustable battery numbers
- Adjustable battery numbers
- ECO mode for energy saving
- N+X parallel redundancy for 6-10KVA



USB

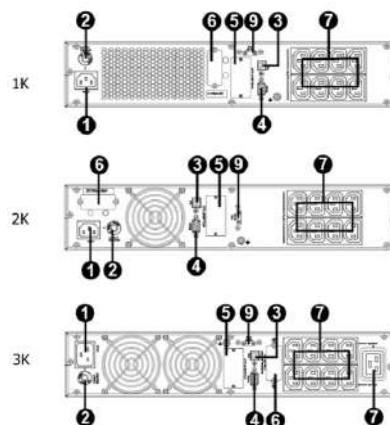


VFI TYPE



PLUG & PLAY

### 1K - 2K - 3K REAR PANEL



- AC input
- Input circuit breaker
- USB communication port
- RS-232 communication port
- SNMP intelligent slot
- External battery connection
- Output receptacles
- Output terminal
- Emergency power off function connector

The Itapower Smart Plus RT is a unique range of high density UPS systems that can be installed whether on the floor in tower form or in rackmount cabinet configurations powering a wide range of applications.

The SMART Plus RT is an ultra efficient system resulting in improved operational performance up to 97% in ECO mode, 92% in inverter mode and over 90% in battery mode, providing a much greener product with smaller battery and longer autonomy backup times.

The range is equipped with the latest digital signal processor (DSP) technology with versatile features demanded by IT managers enabling integration into all types of networking environments.

MODEL	SMART PLUS RT 1000	SMART PLUS RT 2000	SMART PLUS RT 3000	SMART PLUS RT 6000	SMART PLUS RT 10000
P/N	SPR01	SPR02	SPR03	SPR06	SPR010
PHASE	Single phase with ground				
Capacity	1000 VA / 1000 W	2000 VA / 2000 W	3000 VA / 3000 W	6000 VA / 6000 W	10000 VA / 10000 W
<b>INPUT</b>					
Nominal Voltage	200/208/220/230/240 VAC				
Voltage Range	160-300 VAC $\pm$ 5% @ 100% load				
Frequency Range	40Hz ~ 70Hz			46-54 Hz 50Hz / 56-64 Hz 60Hz	
Harmonic Distortion(THDi)	$\leq$ 5% @ nominal input voltage			$\leq$ 4% @ nominal input voltage	
Power Factor	$\geq$ 0.99 @ nominal voltage (100% load)				
<b>OUTPUT</b>					
Output Voltage	200*/208*/220/230/240 VAC				
AC Voltage Regulation (Batt. Mode)	$\pm$ 1%				
Frequency Range (Synchronized Range)	57 ~ 63 Hz or 47 ~ 53 Hz or			46-54 Hz 50 Hz / 56-64 Hz 60 Hz	
Frequency Range (Batt. Mode)	60Hz $\pm$ 0.1Hz or 50 Hz $\pm$ 0.1Hz			50 Hz $\pm$ 0.1 Hz or 60 Hz $\pm$ 0.1 Hz	
Current Crest Ratio	3:1 (max.)				
Harmonic Distortion	$\leq$ 2 % THD (Linear Load); $\leq$ 4 % THD (Non-linear load)			$\leq$ 1% THD (Linear Load), $\leq$ 4 % THD (Non-linear Load)	
Transfer Time	AC mode to Battery mode	Zero			
	Inverter to Bypass	4 ms (Typical)			Zero
Waveform (Batt. Mode)	Pure Sinewave				
<b>EFFICIENCY</b>					
AC Mode	$\geq$ 89% @ full charged battery	$\geq$ 91% @ full charged battery	$\geq$ 91% @ full charged battery	$\geq$ 94% with fully charged battery	
ECO Mode	$\geq$ 96% @ full charged battery			$\geq$ 98.5% with fully charged battery	
Battery Mode	$\geq$ 88%	$\geq$ 90%	$\geq$ 90%	$\geq$ 92%	
<b>BATTERY</b>					
Battery Type	12 V / 9 AH	12 V / 9 AH	12 V / 9 AH	12V-7Ah or 12V /9Ah	
Numbers	2	4	6	16-20 in external battery cabinet	
Typical Recharge Time	3 hours recover to 95% capacity for internal battery@ 2A charging current			9 Hours to 90% capacity for internal battery	
Charging Current	Max. 12A adjustable		Max: 8A adjustable		Max: 8A selectable on front LCD display
Charging Voltage	27.4 VDC $\pm$ 1%	54.8 VDC $\pm$ 1%	82.1 VDC $\pm$ 1%	218.4VDC $\pm$ 1%	
<b>PHYSICAL</b>					
Dimension, D X W X H (mm)	410 x 438 x 88	510 x 438 x 88	630 x 438 x 88	610 X 438 X 88 (2U)	611 X 438 X 88 (2U)
Net Weight (without battery) (kgs)	6.6	9.4	12.4	17	20
Net Weight (w/built-int battery) (kgs)	11.6	19.5	27.5		
<b>ENVIRONMENT</b>					
Humidity	20-90 % RH @ 0- 40°C (non-condensing)				
Noise Level	Less than 50dBA @ 1 Meter			Less than 55dBA @ 1 Meter	Less than 58dBA @ 1 Meter
Altitude	10% de-rating for over 1000m (The altitude should not exceed 3000m)				
<b>MANAGEMENT</b>					
Smart RS-232/USB	Supports Windows® 2000/2003/XP/Vista/2008/7/8, Linux and MAC				
Optional SNMP	Power management from SNMP manager and web browser				
<b>STANDARD</b>					
EMC/safety	EMC EN62040-2 C2 for CE models				

Product specifications are subject to change without further notice

### 6K - 10K REAR PANEL

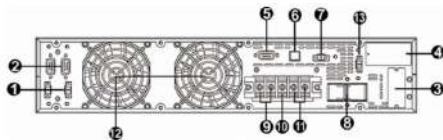


Diagram 1: UPS Rear Panel

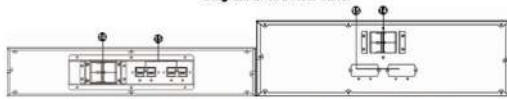


Diagram 2: 2U battery pack

Diagram 3: 3U battery pack

- 1) Share current port (only available for parallel model)
- 2) Parallel port (only available for parallel model)
- 3) External battery connector
- 4) Intelligent slot
- 5) RS-232 communication port
- 6) USB communication port
- 7) Emergency power off function connector (EPO connector)
- 8) Input circuit breaker
- 9) Output terminals
- 10) Ground
- 11) Input terminals
- 12) Cooling Fan
- 13) External maintenance bypass switch port
- 14) Battery pack output circuit breaker