

PowerValue 11 RT

The single-phase UPS for critical applications



ABB's PowerValue11RT is a double-conversion on-line UPS that guarantees up to 10kVA of clean, reliable power for your critical single-phase applications. As well as maintaining power to your servers, point-of-sale terminals, workstation clusters, routers, switches, hubs and sensitive electronic equipment, the PowerValue11RT also conditions incoming power to eliminate spikes, swells, sags, noise and harmonics.

The PowerValue11RT can be used as a standalone UPS device or installed into a standard 19" rack configuration, with connectivity options available for each.

Three units of the 6 or 10kVA models can be configured in parallel to provide redundancy or to increase the systems total capacity up to 30 kW. All units can be fitted with up to four battery modules to extend runtime.

High reliability

- Reliable double conversion topology protects load from all input disturbances
- Batteries can be added or replaced easily
- Reduced recovery time from discharge
- Redundant parallel operation available (6 and 10 kVA units)

Low cost of ownership

- Scalable runtime
- High operating efficiency, regardless of loading
- Reduced installation and upgrading costs
- Compact design

Flexible design

- Configurable in tower or rack-mount format
- Rotatable display
- UPS can be connected with up to four parallel battery modules for extended runtime
- Long backup models available
- Full set of accessories and connectivity options

Efficient service concept

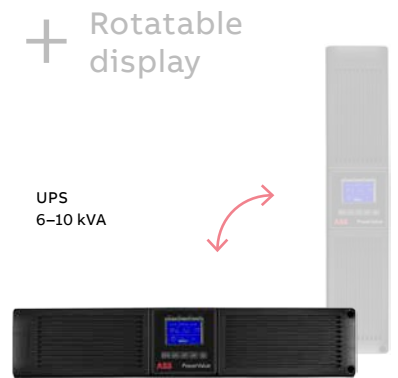
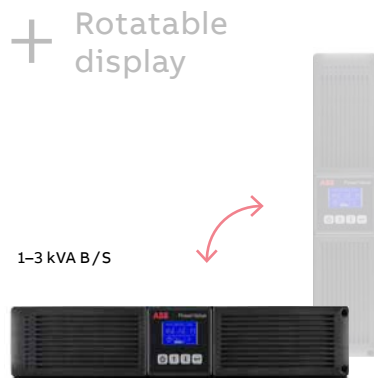
- Manually operated maintenance bypass switch (optional)
- Easy set up and maintenance (plug and play)
- User-friendly display
- Hot swap user-replaceable batteries

PowerValue 11 RT

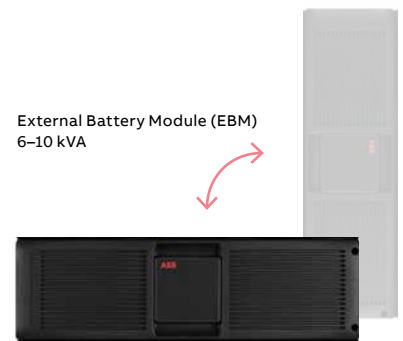
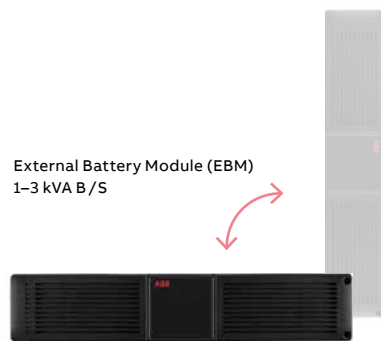
Product features

The advanced system architecture guarantees that the user is able to select a system to match their needs. Scalable runtime and the easy introduction of additional batteries make the solution sustainable.

In addition, three PowerValue11RT 6 or 10kVA UPSs can be connected in parallel to increase total power or to add redundancy. The UPSs are delivered with an installed parallel board and paralleling cables. No additional hardware is required for a parallel installation.



Scalable battery runtime



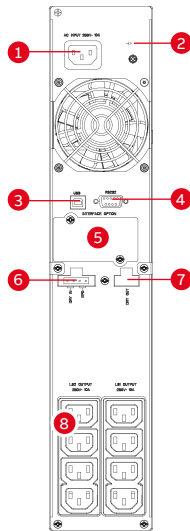
Battery runtime at full / half nominal load

	1kVA B		1kVA S		2kVA B		2kVA S		3kVA B		3kVA S		G2 6kVA		G2 10kVA	
	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%
UPS	<4	8	n.a.	n.a.	4	11	n.a.	n.a.	4	11	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
UPS + 1 EBM	16	40	6	22	12	29	<5	11	13	31	<5	10	7	18	3	9
UPS + 2 EBM	32	76	22	62	22	54	11	34	23	56	10	34	18	49	9	24
UPS + 3 EBM	52	119	40	112	32	78	22	62	35	82	21	61	33	88	16	42,5
UPS + 4 EBM	68	166	62	160	45	105	34	99	49	111	33	98	49	133	24	64

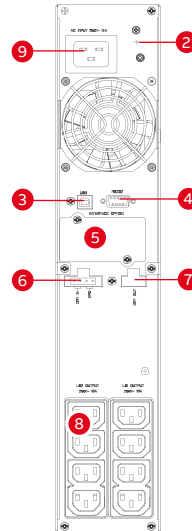
PowerValue 11 RT

Available models

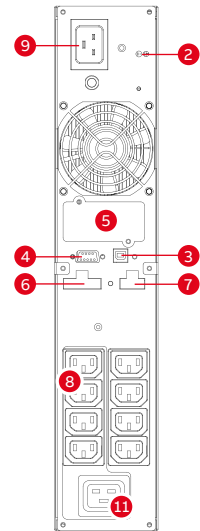
1	AC input 10A
2	Ground contact
3	USB port
4	RS-232
5	SNMP / AS400 slot
6	EPO / dry contact input port
7	Dry contact output port
8	AC output 10A
9	AC input 16A
10	AC input 20A
11	AC output 16A
12	EPO
13	Parallel port
14	Dry in / out
15	MBP connector
16	Output breaker
17	I/O terminals
18	Input breaker
19	EBM connector



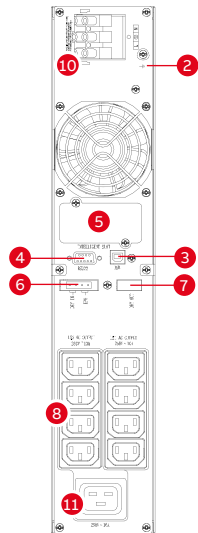
PowerValue 11RT – 1-2kVA B and 1kVA S



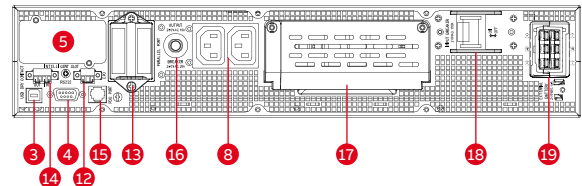
PowerValue 11RT – 2kVA S



PowerValue 11RT – 3kVA B



PowerValue 11RT – 3kVA S



PowerValue 11RT – 6-10 kVA

Options

- Rack installation kit allows for easy mounting to standard 19" rack
- Full range connectivity: SNMP, ModBus (RS-485 and TCP/IP), environmental monitoring probe, relay card with I/O contacts
- External maintenance bypass
- Automatic transfer switch (PowerValue 11RT 1-3 kVA)

UPS cabinet configuration

- Online double conversion UPS
- Efficiency in online mode up to 95%
- Efficiency in eco-mode up to 98%
- Configurable in tower format or rack-mount
- Three 6 kVA and 10 kVA UPSs (max 30 kW per system) can be connected in parallel for redundancy or extra capacity
- Cold start
- Frequency converter operation (50 Hz or 60 Hz)
- Interfaces: USB, RS-232, potential-free contacts, EPO contact inputs
- Emergency power-off for remote shutdown
- Load segmentation (for PowerValue 11RT 1-3 kVA)

PowerValue 11 RT

Technical specification

GENERAL DATA	1kVA B/ S	2kVA B/ S	3kVA B/ S	G2 6kVA	G2 10kVA
Output rated power	900 W	1'800W	2'400W	6'000W	10'000W
Output power factor	0.9	0.9	0.9	1.0	1.0
Topology	Online double conversion				
Parallel configuration	No	No	No	Yes, up to 3 UPS	Yes, up to 3 UPS
Inbuilt batteries	Yes/No	Yes/No	Yes/No	No	No
INPUT					
Nominal input voltage	208/220/230/240 VAC				
Input voltage tolerance	120-276 VAC (load dependent)			100-276 (load dependent)	
Input current THDi	<5% with full resistive load			<3% with full resistive load	
Frequency range	45-55 Hz / 54-66 Hz			45-55Hz / 54-66Hz (extendable to 40~70HZ at load < 60%)	
Power factor	≥0.99			≥0.995	
OUTPUT					
Rated output voltage	208/220/230/240 VAC				
Voltage tolerance	±1% (referred to 230V)				
Voltage distortion	≤2% linear load, ≤5% non linear load			<1% linear load, <5% non linear load	
Overload capacity (linear load) on inverter	12s: 102-129% load 1.5s: 130-150% load 100ms: ≥ 150% load			10m: 102-125% load 30s: 126 to 150% load 500 ms: ≥ 150% load	
Nominal frequency	50 or 60 Hz				
Crest factor	3:1 (load supported)				
EFFICIENCY					
Overall system efficiency	Up to 93%			Up to 95%	
In eco-mode	Up to 95%			Up to 98%	
ENVIRONMENT					
Protection rating	IP20				
Storage temperature	UPS: -25°C to 60°C; Batteries: 0°C to 35°C				
Operating temperature	0°C to 40°C				
Relative humidity	0% to 95%				
Altitude (above sea level)	1000m without derating				
BATTERIES					
Type	VRLA (valve regulated lead-acid)				
Inbuilt batteries	3x7.2 Ah (B)	4x9Ah(B)	6x9Ah(B)	-	-
Charging current	1.5A/6A	1.5A/6A	1.5A/6A	0-12 A adjustable	
Recharge time (inbuilt batteries)	3h to 90%				
COMMUNICATIONS					
User interface	LCD display				
Optional communication cards	SNMP;ModBus;AS400;Environmental monitoring sensor probe				
STANDARDS					
Safety	IEC/EN 62040-1				
EMC	IEC/EN 62040-2				
Performance	IEC/EN 62040-3				
Manufacturing	ISO 9001:2015, ISO 14001:2015, OHSAS 18001				
WEIGHT, DIMENSIONS					
Weight	16.2/8.4 Kg	19.7/9.3 Kg	28.6/13 Kg	13.6 Kg	15.5 Kg
Dimensions w x h x d	438x86.5(2U) x436mm	438x86.5(2U) x436mm	438x86.5(2U) x608mm	438x86(2U) x573 mm	438x86(2U) x573 mm