

PowerValue 11T G2 A cost-effective solution for maximum power protection



ABB's PowerValue 11T G2 is a single-phase in/out, double conversion online uninterruptible power supply (UPS) that guarantees up to 10 kW per single UPS of clean, reliable power for your critical single-phase applications. As well as maintaining power to your server room, advertising display, turnstiles, lab equipment, transportation signaling systems, ATM or vending machine, the PowerValue 11T G2 also conditions incoming power to eliminate spikes, swells, sags, noise and harmonics.

Featuring voltage and frequency independent (VFI) topology, the tower-only PowerValue 11T G2 saves costs by minimizing energy losses with its double

conversion efficiency of up to 95 percent (up to 98% in ECO mode). Two or three units can be connected in parallel to boost power delivery to a maximum of 30 kW or to provide redundancy.

Simple to install or maintain, inexpensive to run and with the most compact online UPS footprint available on the market, the PowerValue 11T G2 provides stable, regulated, transient-free, pure sine wave AC power with extremely tight output voltage regulation. All units can be fitted with up to four external battery modules (EBMs) to extend runtime to well over two hours. Each EBM is dedicated to its corresponding UPS and setup is easily accomplished via the LCD menu.

High reliability

- Double conversion topology protects the load from all input disturbances
- Parallelable up to three units (6-10k only) to provide system redundancy
- User replaceable batteries
- Wide input voltage tolerance

Low cost of ownership

- Scalable runtime
- High operating efficiency
- · Low installation and upgrading costs
- Compact design
- Output power factor of 1.0 (6-10 kVA only)

Flexible design

- Multiple connectivity options
- Each UPS can be connected with up to four parallel battery modules for extended runtime
- Adjustable DC voltage and battery charger current
- Extended backup time models available
- Best power density available in the market segment

Efficient service concept

- Integrated manually operated maintenance bypass switch (6-10 kVA only)
- Easy setup and maintenance (plug and play)
- User-friendly display
- Remote monitoring options

PowerValue 11T G2 Product features

The PowerValue 11T G2 with its cost-effective ABB UPS technology makes a high-performance and is now available to market sectors with lower power requirements: Small server rooms, critical lab or industrial equipment, security installations and applications of a similar power class can now profit from one of 12 PowerValue 11T G2 models.

With the most compact online UPS footprint available, the PowerValue 11T G2 features true on-line double conversion. This provides a flexible output frequency and isolates the UPS from upstream disturbances so that the critical load sees only stable, well-regulated, transient-free, pure sine wave AC power.

A rated output power factor up to 1.0 (kVA = kW) means the PowerValue 11T G2 delivers 11 percent more active power than a UPS with a power factor of 0.9. The UPS is optimized for modern IT loads and helps users reduce their energy budget with its

UPS configuration

Standard

- Tower-type, IP20 UPS enclosure
- Single-phase in and out
- Online double conversion UPS
- Paralleling up to three units allows for increase of capacity to 30 kW or redundancy (6-10 kVA only)
- Operator and status LCD
- Wide voltage input frequency range
- Inbuilt batteries (B/B2 versions only)
- Maintenance bypass switch (6-10 kVA only)
- Plug-and-play

Options

- Additional battery cabinets (EBM) for scaling autonomy time
- SNMP, ModBus and AS400 interface cards for remote control and monitoring of the UPS via a web browser
- Sensors combined with the network interface card, environmental humidity and temperature sensors can be integrated into the system and monitored remotely
- Connectivity functionality via Winpower SNMP (network management card), mini SNMP, ModBus, mini ModBus, EMP (environmental monitoring probe), AS400 and mini AS400

Model	Internal batteries	EBM	UPS	UPS + 1 EBM	UPS + 2 EBM	UPS + 3 EBM	UPS + 4 EBM
G2 1 kVA B	1 x 2 x 9.4 Ah	3 x 2 x 9 Ah	5	23	52	85	120
G2 1 kVA S	No	3 x 2 x 9 Ah	-	17	48	70	100
G2 2 kVA B	1 x 4 x 9.4 Ah	3 x 4 x 9 Ah	5.5	25	55	90	125
G2 2 kVA S	No	3 x 4 x 9 Ah	-	18	50	80	110
G2 3 kVA B	1 x 6 x 9.4 Ah	2 x 6 x 9 Ah	5.5	16.5	35	55	80
G2 3 kVA S	No	2 x 6 x 9 Ah	-	10.5	28	50	70
G2 6 kVA B	1 x 16 x 7.2 Ah	2 x 16 x 9 Ah	4	18	41	68	99
G2 6 kVA B2	1 x 20 x 7.2 Ah	2 x 20 x 9 Ah	5.5	25	55.5	92.5	134
G2 6 kVA S	No	2 x 20 x 9 Ah	-	18	49	88	133
G2 10 kVA B	1 x 16 x 9 Ah	2 x 16 x 9 Ah	3	12	25	39	55.5
G2 10 kVA B2	1 x 20 x 9 Ah	2 x 20 x 9 Ah	4	17	34	53	75
G2 10 kVA S	No	2 x 20 x 9 Ah	-	9	24	42.5	64

Battery runtime at full nominal load

double conversion efficiency of up to 95 percent (up to 98% in ECO mode).

- Low input line disturbances: input PF ≥ 0.995 @ 100 percent linear load – THDi < 3 percent
- Flexible configuration for scalable runtime: UPS and EBMs with and without batteries (long backup)
- Adjustable DC voltage and battery charger current
- Digital charger technology provides accurate charger current setting and reduces charger ripple current
- The UPS is delivered with an inbuilt parallel board and paralleling cables. No additional hardware is required for this installation.

All this with the same guaranteed high availability and quality standards as ABB's higher-power premium UPS models - and at the most attractive entry level price around.

PowerValue 11T G2

Available models



1. AC input 10 A	4. Mini SNMP/ Mini ModBus / Mini AS400	7. AC input 16 A	10. EBM connector
2. USB port	5. EPO / dry input	8. Output breaker	11. AC output 20 A
3. RS-232	6. AC output 10 A	9. AC output 16 A	12. GND contact



13. SNMP/ModBus/AS400	16. Reserved for future use	19. Parallel port	22. Input breaker	
14. USB port	17. EBM connector	20. EPO	23. I/O terminals	
15. RS-232	18. Dry in / out	21. MBP switch		



PowerValue 11T G2 Technical specifications

GENERAL DATA	G2 1kVA B/ S	G2 2kVA B/ S	G2 3kVA B/ S	G2 6kVA B/ B2 / S	G2 10kVA B/ B2 / S	
Output rated power	900 W	1'800W	2'700W	6'000W	10'000W	
Output power factor	0.9	0.9	0.9	1.0	1.0	
Тороlоду	Online double conver	rsion				
Parallel configuration	No	No	No	Yes, up to 3 UPS	Yes, up to 3 UPS	
Inbuilt batteries	Yes/No	Yes/No	Yes/No	Yes/Yes/No	Yes/Yes/No	
INPUT						
Nominal input voltage	220/230/240 VAC			208/220/230/240 VAC	2	
Input voltage tolerance	100-300 VAC (load de	ependent)		100-276 (load depend	ent)	
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	220/230/240 VAC			208/220/230/240 V	AC	
Voltage tolerance	±1% (referred to 230)	V)				
Voltage distortion	<2% linear load, <6%	-		<1% linear load, <5% n	on linear load	
Overload capacity (linear	60s: 106-130% load			10m: 102-125% load		
load) on inverter	10s: 131-150% load			30s: 126 to 150% load		
	300ms: ≥ 150% load			500 ms: ≥ 150% load		
Nominal frequency	50 or 60 Hz					
Crest factor	3:1 (load supported)					
EFFICIENCY						
Overall system efficiency	Up to 89%	Up to 91%	Up to 91%	Up to 95%		
In eco-mode	Up to 97.5%	Up to 98%	Up to 98%	Up to 98%		
ENVIRONMENT						
Protection rating	IP20					
Storage temperature	UPS: -25°C to 60°C; B	Batteries: 0°C to 35°C				
Operating temperature	0°C to 40°C			0°-40°C (up to 50°C at	50% load)	
Relative humidity	0% to 95%					
Altitude (above see level)	1000m without dera	ting				
BATTERIES						
Туре	VRLA (valve regulated	d lead-acid)				
Inbuilt batteries	2x9.4 Ah (B)	4x9.4Ah(B)	6x9.4Ah(B)	16x9Ah(B)	16x9Ah(B)	
				20x9Ah (B2)	20x9Ah (B2)	
Charging current	1.5A/3-6A adjustable	1.5A/1.5-6A adjustable	1.5A/1.5-6A adjustable	0-4A adjustable (B,B2) 0-12 adjustable (S)		
Recharge time (inbuilt batteries)	4h to 90%					
COMMUNICATIONS						
User interface	LCD display					
Optional communication cards		0;Environmental monit	toring sensor probe			
STANDARDS	•		- •			
Safety	IEC/EN 62040-1					
EMC	IEC/EN 62040-2					
Performance	IEC/EN 62040-3					
Manufacturing		4001:2015, OHSAS 180	001			
WEIGHT, DIMENSIONS						
Weight	0.2/2.0.1/~	17 4 /6 4 / ~	227/641/~	E2/62/12 //~		
Dimensions w x h x d	9.2/3.9 Kg 144x228x356 mm 102x228x346mm	17.4/6.4 Kg 190x327x399 mm 102x327x390 mm	22.7/6.4 Kg 190x327x399 mm 102x327x390 mm	53/63/13 Kg B / B2: 225 x 589x 452 mm	55.2/65.2/15.2 Kg B / B2: 225 x 589x 452 mm	

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