

PowerValue 11/31/33T G2 10–20kVA UPS

Uninterrupted Power. Unmatched Reliability.
Future-Ready Performance.



Secure your critical systems with the ABB PowerValue 11/31/33T G2 10-20kVA UPS, engineered for reliable power protection against outages and surges. This scalable 10-20kVA solution offers flexible controls, customizable configurations, and energy-efficient performance—ensuring seamless uptime for demanding environments. Trust ABB’s innovation to keep operations running smoothly.

Seamless Power Protection for Mission-Critical Equipment

The PowerValue 11/31/33T G2 UPS ensures your operations never skip a beat. With its advanced double-conversion technology, it continuously cleans and stabilizes incoming power, delivering pristine AC electricity to your equipment. Even during outages, the transition to battery power is instant and seamless—zero downtime, zero disruptions.

Key Features at a Glance:

- **Always-On Power:** Instant battery backup during outages.
- **Energy saving:** Up to 96% in online mode and 98% in ECO mode could reduce energy waste during running.
- **Global Accessibility:** Touch-enabled LCD with 7 selectable languages.

Engineered for Simplicity & Intelligence

1. Constant Voltage & Frequency (CVCF) Mode

Ensure flawless power quality for sensitive equipment. The CVCF mode eliminates fluctuations, shields against grid disturbances, and guarantees stable voltage/frequency output. Simply select the mode via the intuitive LCD interface—installation is plug-and-play.

2. Cold Start Capability

Start your UPS even during a blackout. Ideal for emergencies, this feature lets you power up critical systems directly from batteries, helping you diagnose power supply issues swiftly.

3. Remote Power Off (RPO)

Enhance safety with full disconnection of AC/DC power sources. Restore operations effortlessly by resetting the RPO connector and pressing the power button—your system reboots seamlessly.

4. Adaptive Cooling

Smart fan speed control optimizes energy use while maintaining safe operating temperatures, reducing power costs without compromising reliability.

5. Scalable Power Solutions

Need more capacity or redundancy? Parallel up to 3 units effortlessly using built-in hardware—no extra components required. Grow your power infrastructure as your business expands.

Built Smarter, Designed to Last

The PowerValue 11/31/33T G2 10–20kVA UPS isn’t just built to protect your equipment—it’s engineered to thrive in the most demanding environments while delivering long-term value. Here’s how:

Wide Input Tolerance: Stability in Chaos

Not all power grids are created equal. The PowerValue G2 UPS excels in regions with erratic voltage or unstable frequencies (40–70Hz input range), automatically filtering out surges, sags, and noise. By intelligently staying in bypass or normal mode during minor fluctuations, it reduces unnecessary battery cycles. This not only extends battery lifespan by up to 30% but also ensures your critical systems stay online longer during prolonged grid instability.

Modular Design: Effortless Maintenance, Zero Hassle

Time is money, and downtime is unacceptable. The UPS’s modular designed architecture means you can replace or upgrade parts like power modules, batteries, or fans, to have less MTTR on site.

Superior Efficiency & Flexibility:

Power Meets Precision

- **95–96% Energy Efficiency:** Outperform competitors with industry-leading efficiency, slashing energy waste and cooling costs. This translates to lower electricity bills and a greener footprint—ideal for eco-conscious organizations.
- **Adjustable Charging Current (Up to 13A):** Tailor battery charging to your needs via the intuitive LCD interface. Optimize charging speeds for fast recovery during frequent outages or dial it back to extend battery longevity in stable environments.
- **Backfeed Protection (BF Models):** Prevent dangerous reverse power flow with built-in safeguards, ensuring compliance with safety standards and protecting both your equipment and personnel.

Technical Highlights: Engineered for Excellence

- **Input/output Flexibility:** Flexible to select 1:1, 3:1 and 3:3 phase input/output from LCD on site, without derating on 3:1 and 3:3 mode.
- **Dry Contact Support:** Integrate effortlessly with building management systems, fire alarms, or SCADA systems using 230V AC or 48V DC dry contacts.
- **Powerful charger:** Up to 13A charger current brings shorter recharging time.

Network interface card

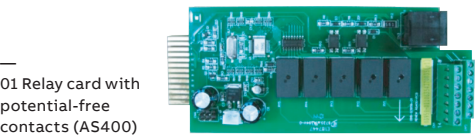
Enables real-time monitoring of your UPS system via a standard web browser or by using the included monitoring software. ABB’s monitoring devices provide real-time visibility of the condition of your power equipment and help solve problems before they become critical.

Supported models

Network Management Card (NMC)	Modbus Card (Modbus)	Temperature and humidity sensors (EMP)

Relay interface card

Provides contact closures for remote monitoring of alarm conditions of PowerValue 11/31/33T G2 10–20kVA UPS systems. The card is user-installable, hot-swappable and enables advanced communication between the UPS and the computer.



Models

NMC Card	4NWP100110R0001
Modbus Card	4NWP104039R0001
EMP	4NWP104040R0001
AS400 Card	4NWP100120R0001

Monitoring software

This is an advanced UPS management software suite that allows remote control and monitoring of UPS equipped with network interface cards in a LAN or Internet environment. It can manage a single or multiple UPSs and prevent data loss from a power outage by programming a safe system shutdown. The software is included with the NMC adapter.

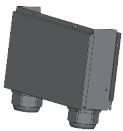
Serial Communication Cable

- RS232 cable



UPS hard-wiring installation

- Gland Kit



Rear view



Technical specifications

GENERAL DATA	10 kVA B/10 kVA B BF	10 kVA S/10 kVA S BF	20 kVA B/20 kVA B BF	20 kVA S/20 kVA S BF
Apparent power	10kVA	10kVA	20kVA	20kVA
Active power	10kW	10kW	20kW	20kW
UPS type	Online double conversion			
Battery	Inbuilt	/	Inbuilt	/
Overvoltage category	Overvoltage category II	Overvoltage category II	Overvoltage category II	Overvoltage category II
MECHANICAL				
Dimensions (width×height×depth) [mm]	300 x 805 x 726	300 x 805 x 726	300 x 805 x 726	300 x 805 x 726
Weight (with batteries)	106 kg	53 kg	160 kg	55 kg
ACOUSTIC NOISE (ISO 7779&At front 1m distance, without buzzer)				
In normal mode (at <=25 °C) at 100/50% Load	<55 dBA	<55 dBA	<55 dBA	<55 dBA
In battery mode (at <=25 °C) at 100/50% Load	<58 dBA	<58 dBA	<58 dBA	<58 dBA
SAFETY				
Access	Operator	Operator	Operator	Operator
Degree of protection against hazards and water ingress	IP 20	IP 20	IP 20	IP 20
ELECTROMAGNETIC COMPATIBILITY				
Compliant to IEC 62040-2	Yes	Yes	Yes	Yes
Category Emission/Immunity	C3	C3	C3	C3
ENVIRONMENTAL				
Storage temperature range	-15 °C – +40 °C	-25 °C – +55 °C	-15 °C – +40 °C	-25 °C – +55 °C
Operative temperature range	0 °C– +40 °C	0 °C– +40 °C	0 °C– +40 °C	0 °C– +40 °C
	+40 °C – +50 °C (output power and charger current derating 50%)	+40 °C – +50 °C (output power and charger current derating 50%)	+40 °C – +50 °C (output power and charger current derating 50%)	+40 °C – +50 °C (output power and charger current derating 50%)
Relative humidity	≤95% (non-condensing)	≤95% (non-condensing)	≤95% (non-condensing)	≤95% (non-condensing)
Operating altitude	0~4,000 m (1,000 m without derating; load derating 1% every 100 m @ 1,000~4,000 m)			
ADDITIONAL AND USUAL INFORMATION				
Input connection	5 wires (3 phase + N + PE) or 3 wires (1 phase + N + PE)			
Output connection	3 wires (1 phase + N + PE)		5 wires (3 phase + N + PE) or 3 wires (1 phase + N + PE)	
Cable entry	Rear	Rear	Rear	Rear
External battery cable entry	Rear	Rear	Rear	Rear
Accessibility	Front and rear	Front and rear	Front and rear	Front and rear
UPS frame cabinet color	RAL9005	RAL9005	RAL9005	RAL9005
Air outlet	Front to back	Front to back	Front to back	Front to back
OPTIONS				
Network Management Card (NMC)	Yes	Yes	Yes	Yes
Temperature and humidity sensors (cooperate with NMC)	Yes	Yes	Yes	Yes
Modbus card	Yes	Yes	Yes	Yes
Relay card with potential-free contacts (customer outputs)	Yes	Yes	Yes	Yes
RS232 cable	Yes	Yes	Yes	Yes
Gland Kit	Yes	Yes	Yes	Yes
INCLUDED (DEFAULT)				
Pre-installed, parallel kit	Included	Included	Included	Included
Sea freight packaging (pallet, carton box)	Included	Included	Included	Included
Maintenance bypass switch	Included	Included	Included	Included
Back-feed protection	Internal (BF model)	Internal (BF model)	Internal (BF model)	Internal (BF model)

Input characteristics

	10 kVA B/10 kVA B BF	10 kVA S/10 kVA S BF	20 kVA B/20 kVA B BF	20 kVA S/20 kVA S BF
Acceptance voltage (steady-state, r.m.s)	100–300 VAC (L–N)	100–300 VAC (L–N)	100–300 VAC (L–N)	100–300 VAC (L–N)
Nominal voltage	220–240VAC (1Phase+N+PE) 380–415VAC (3Phase+N+PE)			
Tolerance	<100V: Go to battery mode 100V~160V: Max Load%=(input voltage–100V)*50%/(160V–100V)+50% 160V~300V: 100 % load 300V: Go to battery mode			
Frequency, rated	50Hz/60Hz (selectable)	50Hz/60Hz (selectable)	50Hz/60Hz (selectable)	50Hz/60Hz (selectable)
Frequency tolerance	45 Hz – 55 Hz (50 Hz system) / 54 Hz – 66 Hz (60 Hz system)			
Rated Input Current	65A, 1Phase+N+PE 22A, 3Phase+N+PE	65A, 1Phase+N+PE 22A, 3Phase+N+PE	129A, 1Phase+N+PE 43A, 3Phase+N+PE	129A, 1Phase+N+PE 43A, 3Phase+N+PE
Maximum current (with charging batt. and input voltage tolerance)	67A, 1Phase+N+PE 24A, 3Phase+N+PE	67A, 1Phase+N+PE 24A, 3Phase+N+PE	131A, 1Phase+N+PE 45A, 3Phase+N+PE	131A, 1Phase+N+PE 45A, 3Phase+N+PE
Total harmonic distortion (THDi)	<4% @ 100% R Load	<4% @ 100% R Load	<4% @ 100% R Load	<4% @ 100% R Load
Power factor	≥ 0.99 @ 100% load	≥ 0.99 @ 100% load	≥ 0.99 @ 100% load	≥ 0.99 @ 100% load
Rated short-time withstand current (ICW) (Non-BF model)	2kA for 1 s	2kA for 1 s	2kA for 1 s	2kA for 1 s
AC power distribution system	TN-S, IT, TN-C, TT	TN-S, IT, TN-C, TT	TN-S, IT, TN-C, TT	TN-S, IT, TN-C, TT
Phases required	3 phases or 1 phase	3 phases or 1 phase	3 phases or 1 phase	3 phases or 1 phase
Neutral required	Yes	Yes	Yes	Yes
Connection	5 wires (3 phase + N + PE) or 3 wires (1 phase + N + PE)			
Cable entry	Rear	Rear	Rear	Rear

