

1:1



1-3kVA

Capacity range

IP55

Outdoor cabinet

-10~55°C

Cabinet ambient

115-295 V

Input window (± 3 V)

40-60 Hz

Input frequency

A/C

Internal Air condition

Outdoor VFI. Thermal-Managed.

Double-conversion online · Integrated air-condition · -10 to +55 °C cabinet ambient (A/C active)

Input 115-295 VAC (± 3 V) · 40-60 Hz · IP55 outdoor cabinet

Applications



Transportation



CCTV



Traffic Lights



Local Area
Networks



Telecom



Industrial

ATENCO PowTerra is an outdoor, air-conditioned, double-conversion online UPS that delivers pure sine-wave power at constant frequency and voltage without interruption.

Its cabinet adds heat-insulation with dust-, damp- and waterproof protection, and uses a four-layer layout for fans, UPS + lightning protection + maintenance switch, power distribution, and batteries.

Thermal management is integrated: fans stop below 40 °C to extend service life, and a heater starts below 0 °C for cold conditions. Electrical tolerances are wide-input 115-295 VAC with voltage compensation and 60 Hz-plus PFC technology and a standard bypass mode.

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PowTerra Outdoor Online UPS 1-3kVA

Application

- Designed for deployment at urban intersections, remote roadside cabinets, mountain sites, and other harsh locations—including high temperatures (up to +50 °C), low temperatures (down to -10 °C), severe dust, moisture, rain and mist exposure, and areas with very poor power quality (sustained input above 260 V or below 160 V, with abnormal frequency).

Reliable power supply

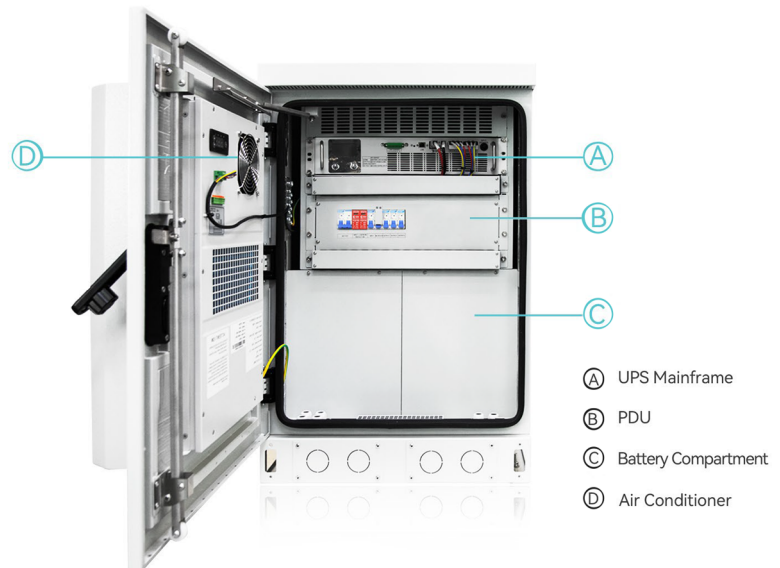
- ATENCO PowTerra Series is a high-performance, integrated outdoor online UPS designed for wireless communication systems—especially microcell/base-station and edge-network sites.
- It delivers continuous, double-conversion protection in a rugged, field-ready design that balances advanced engineering with practical deployment.

Key Features:

- Outdoor intelligent high-frequency online UPS delivering continuous pure-sine AC for communication and network equipment in the field.
- Double-conversion architecture with high-temperature and low-temperature tolerance; IP55 sealed cabinet for outdoor environments.
- Wide input window: voltage -45% to +35% of rated and frequency $\pm 10\%$ of rated, suitable for remote areas with severely unstable grids.

High system reliability:

- Microprocessor-controlled SPWM inverter regulates output precisely and reacts quickly to grid/load changes.
- Simplified control architecture (fewer components and loops) improves stability and reduces failure points—raising overall UPS reliability.



- Ⓐ UPS Mainframe
- Ⓑ PDU
- Ⓒ Battery Compartment
- Ⓓ Air Conditioner

Robust Outdoor Structure

- IP55/IP56 dust- and water-resistant enclosure for outdoor deployment.
- Galvanized steel construction for strong corrosion resistance.
- Sun protection, thermal insulation, and roof ventilation to limit solar gain and stabilize internal temperature.
- Outdoor-grade powder coating with high-temperature and corrosion resistance.

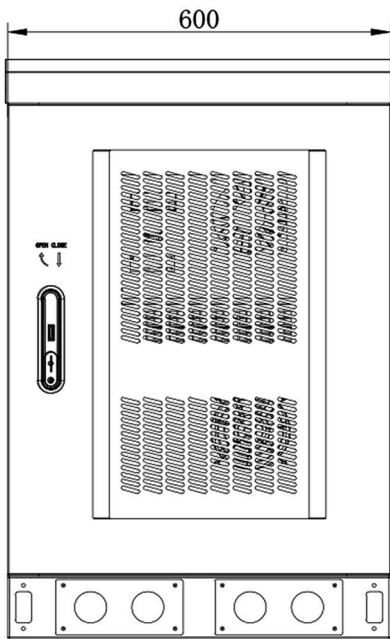
Environmental Adaptability

- Wide input voltage, avoiding frequent switching to battery power supply due to excessive grid voltage, reducing the probability of battery failure, and adapting to the power environment in poor areas.
- 45–55 Hz input frequency ensures stable operation with fuel generators and meets typical genset requirements.

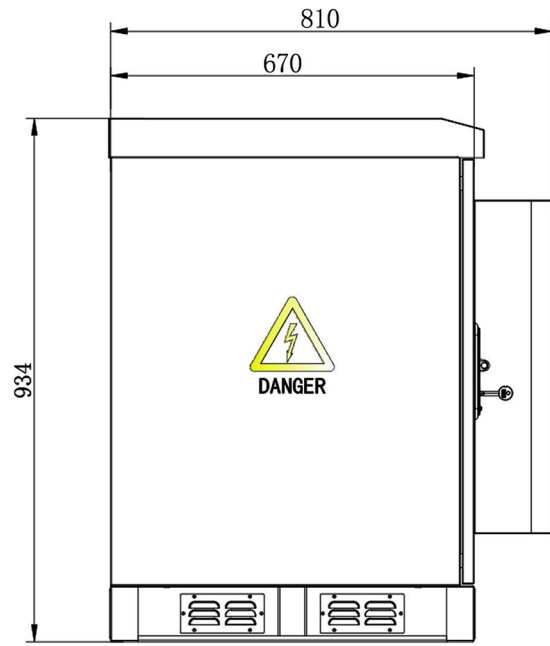
Optional Accessories

- Air-conditioner / Heat-exchanger: effectively lowers internal cabinet temperature and improves the enclosure's IP protection level.
- Heater and Temperature Controller: In response to low temperature climate impact on batteries and UPS, we adopt

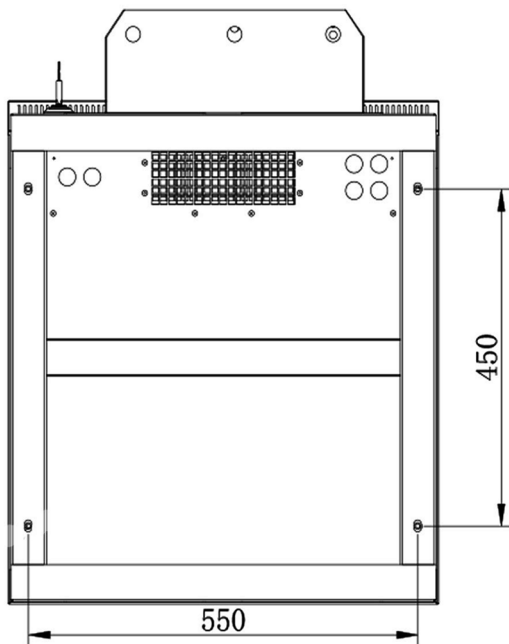
Dimensions



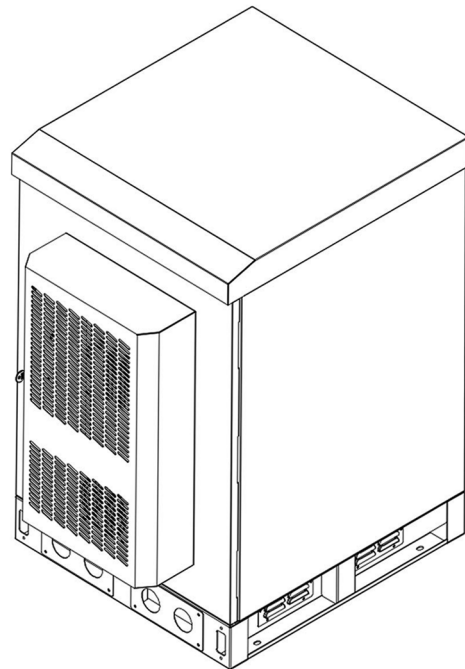
Front



Left Side



Top View



Right Side

PowTerra Technical Specifications

	PowTerra		
Model	PT-1kVA	PT-2kVA	PT-3kVA
Capacity	1kVA / 0.8kW	2kVA / 1.6kW	3kVA/2.4kW
Nominal Voltage	220/230/240VAC		
Frequency	50Hz / 60Hz		
INPUT			
Voltage range	115-295VAC (±3VAC)		
Frequency range	50Hz (46-54Hz) ; 60Hz (56-64Hz)		
Soft range	0-100% 5 sec		
Power factor	0.98		
OUTPUT			
Voltage precision	220/230/240VAC × (1±2%)VAC		
Frequency precision	50Hz/60Hz ± 0.05Hz		
Power factor	0.8/0.9 (optional), standard 0.8		
Wave distortion	Linear load <3%; non-linear load<6%		
Overload capability	Overload (110%~150%) for 30 seconds, automatically transfer to bypass. When the load is back to normal, it can automatically transfer to online mode.		
Crest factor	3:1		
Transfer time	0 ms (AC to DC)		
DC supply voltage	36V/48V	48V/72V	72V/96V
Charging current	4A/8A (optional)		
BATTERY			
Internal battery capacity	Lead Acid Battery 12VDC 100Ah x 4		
PANEL DISPLAY			
LCD	Load level, Battery level, Battery indicator, Utility power, Inverter, Bypass, Overload, Fault		
COMMUNICATIONS			
Communicate interface	RS232, SNMP card (optional)		
WORK ENVIRONMENT			
Temperature	-10°C~60°C		
Humidity	0~95% (Non condensing)		
Storage temperature	-25°C~65°C		
Elevation	<1500m		
COOLING SYSTEM			
Cooling fans	AC FAN 220V 2600R x 2		
Cabinet air conditioner	AC 220V 600W		
PHYSICAL CHARACTERISTICS			
Net weight (without battery)	96KGS (Not include battery)		