

Outdoor XUPs

Outdoor XUPs and EXt model

XUPs-600-6969

600 VA
480 watts
120/240V input
120V output
1.7 hrs @480W
0° to +55°C;
-40° to +55°C
with optional
battery heater

EXt-6969

For 600 VA or
a 480 watts
load: adds
2 hrs @480W
0° to +55°C;
-40° to +55°C
with optional
battery heater

Pure sine wave

wide temperature batteries

voltage regulation

Outdoor UPS with voltage regulation

The OutdoorXUPs-600-6969 UPS is constructed with extreme wide temperature batteries, and is housed in a weather protected IP44 (NEMA-3R) enclosure designed to be mounted on a bracket and blend in with the environment. This unit offers line-interactive automatic voltage regulation, over/under-voltage protection, surge protection with noise filtering, communications capability, maintenance bypass switch and options of automatic bypass switch and extended battery backup.

Key Outdoor XUPs benefits

This rugged UPS design, with microprocessor-controlled 20 kHz sine wave inverter, reduces the number of solid-state devices required for power conversion and is suitable for use in severe outdoor environments.

Outdoor XUPs extreme/wide temperature batteries allow operation of the UPS system over an ambient temperature range of 0° to +55°C (32° to +131°F); -40° to +55°C (-40° to +131°F) with optional battery heater. Built-in automatic voltage regulation enables a wide input voltage window within which power is delivered without having to drain or exercise the batteries, thereby ensuring long battery life. Battery run-times for the outdoor XUPs-600-6969: 1.7 hours at 480 watts load, 4 hours at 240 watts load; the optional EXt-6969 provides an additional 2 hours at a 480W load and 4.5 hours at 280 watts load.

How the Outdoor XUPs works

The Outdoor XUPs Series UPS provides automatic voltage regulation with surge protection and noise filtering, as well as overvoltage protection with a threshold of 140 vac, and undervoltage protection with a threshold of 95 vac per leg. Upon a brownout, overvoltage, or loss of power, the XUPs will transfer to battery power in less than 4 milliseconds, enabling uninterrupted operation of computer, telecom, surveillance, signaling or other systems. Optional automatic bypass switches to bypass in case of UPS failure, and may be used to enable some maintenance without loss of power to the load.

By unlatching, the front door swings open; inside the cabinet is an array of LED status indicators, a convenience outlet, maintenance bypass switch, circuit breakers, and a power on/off switch.



Typical applications

This heavy duty outdoor UPS is ideal for protection of WiFi/GSM/CDMA/satellite base stations, wireless communications/perimeter surveillance and security/gate control systems, LED traffic light/roadway display systems and industrial RTUs.

Key Outdoor XUPs features

- Cabinet and color are designed for pole mounting and blending in with the environment
- Full weather outdoor protection IP44 (NEMA-3R) metal cabinet
- Pure sine wave output
- Over/under-voltage protection
- Built-in maintenance bypass. Automatic static bypass (optional)
- Wide temperature batteries
- Surge protection and noise filtering
- Automatic voltage regulation
- Two year limited warranty; batteries are covered by battery manufacturer's limited warranty



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Outdoor XUPs



Outdoor line-interactive UPS with automatic voltage regulation, maintenance bypass and wide temperature batteries



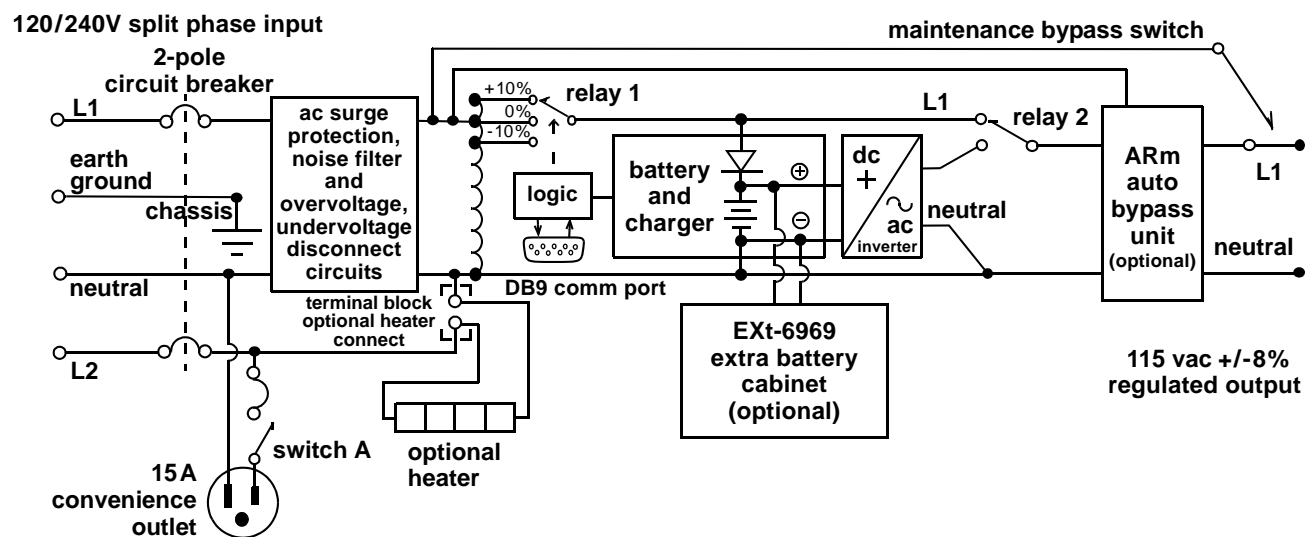
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Specifications	OutdoorXUPs-600-6969
Electrical	
Capacity in VA (watts)	600VA (480W maximum output)
UPS topology	High efficiency line-interactive with 20 kHz PWM sine wave inverter.
Input	
Nominal voltage	120/240 vac, split phase, L1, L2, N & Ground with 2 pole circuit breaker
Input current maximum	6.2 amperes @ 120 vac
UPS operating voltage	95 – 140vac (within which UPS will not have to use batteries).
Frequency	47 – 63Hz.
Hardwire connection	Four (4) position terminal blocks provided for four (4) x 1.5mm ² (16AWG) connections via 25mm(1") liquid-tight cable glands.
Output	
Nominal voltage	120 volts ac
Voltage regulation	115 vac +/- 8% upon changes in line or load
Crest ratio	3:1
Output waveform	Pure sine wave, less than 3% THD with linear load
Power efficiency	95% at full load when in ac line mode with fully charged batteries
Power on/off switch	On/off rocker style power switch
Transfer time	<4 milliseconds
Batteries	Four 31 Ah, 12 vdc wide temperature sealed gel-cells rated for 0° to 55°C (32° to 131°F); -40° to +55°C (-40° to +131°F) with optional battery heater.
Battery backup time and recharge time	1.7 hours @ 480 watts load, or 4 hours @ 240 watts load. 12 hours to 90% capacity after full discharge.
Optional extra battery pack(s) for longer backup time (heater optional)	Optional matching size EXt-6969 extra battery cabinet available with SB50 connector. Provides extra six 12vdc, 31 Ah wide temperature batteries for an extra 2 hours @ 480W load, or 4.5 hours @ 280W load. Weight: 90kg(200 lbs).
SNMP interface for UPS monitoring and automatic shutdown configuration (optional)	Using an external SNMP adapter, the RS-232 signals (from the DB-9 female connector) from the UPS can be converted to 10M/100M fast Ethernet signals (and RJ-45 connection) for external UPS monitoring/configuration capability using Telnet, web browsers, or NMS (for TCP/IP, UDP, SNMP, Telnet, SNTp, PPP, HTTP & SMTP protocols).
Surge let-through voltages	Test pulse injection: Line-Neutral: Line-Ground: and Neutral-Ground. Combination Wave: L-N: 450V, L-G: 300V, N-G: 300V
Status indicators	5 LEDs for load level: 0 to 100% of rated load. 5 LEDs for battery charge level: from 0 to 100% of rated charge. 3 LEDs for: in boost, buck or normal mode. 3 LEDs for: inverter on/off, battery fault and overload.
Maintenance bypass and optional ARm unit	Includes built-in maintenance bypass switch. Optional static bypass switch (automatic redundancy module) available in case of UPS failure.
Physical	
Dimensions	292mm(11.5") wide x 292mm(11.5") deep x 660mm(26") high
Weight	72kg(160 lbs)
Steel cabinet	Full weather IP44(NEMA-3R) outdoor design in storm gray color.
Mounting options	Four threaded studs on back provides for mounting to customer supplied pole bracket.
Environmental	
Operating temperature	0° to 55°C (32° to 131°F) ambient air temperature. -40° to +55°C (-40° to +131°F) with optional battery heater.

TSi's ongoing product improvement process makes specifications subject to change. Other companies product names herein are for identification purposes only, and may be trademarks of their respective companies.



OutdoorXUPs-600-6969 system architecture



OutdoorXUPs-600-6969 at a glance

Heavy-duty outdoor UPS with line-interactive automatic voltage regulation and extreme/wide temperature batteries

- Wide ambient temperature range sealed gel-cell batteries:
0° to 55°C (32° to 131°F);
-40° to +55°C (-40° to +131°F) with optional battery heater
- **1.7 hours @ 480 watts load,**
4 hours @ 240 watts load
- **3.7 hours @ 480 watts load,**
8.5 hours @ 280 watts load with the addition of an EXt-6969
- 115 vac +/- 8% output from 95 – 140 vac input without going to batteries
- Microprocessor-controlled 20 kHz PWM sine wave inverter
- Built-in bypass switch for UPS maintenance.
- Optional automatic bypass in case of UPS failure



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