

Outdoor XUPs

Pure sine wave

wide temperature -40° to +60°C

voltage regulation

Outdoor XUPs model

600C

600 VA
420 watts
120 vac
50/60Hz
-20° to +60°C;
-40° to +60°C
with optional
battery heater
11 hrs @ 400W

Extreme wide temperature outdoor UPS with voltage regulation and 11 hours backup time

The TSi Power Outdoor XUPs-600C is constructed with wide temperature batteries and housed in a weather protected IP44 (NEMA-3R) enclosure. It offers line-interactive automatic voltage regulation, over/under-voltage and surge protection with heavy duty noise filtering, communications capability and extended battery backup.

Key Outdoor XUPs-600C benefits

This rugged UPS design with optional conformal coated boards and 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-600C extreme/wide temperature batteries allow operation of the UPS system over an ambient temperature range of -20° to +60°C (-4° to +140°F); -40° to +60°C (-40° to +140°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. A fan exhausts hot air to protect batteries and electronics. Battery run-time for the OutdoorXUPs-600C is **11 hours with a 400 watts load.**

How the Outdoor XUPs works

The Outdoor XUPs-600C provides constant voltage regulation, surge protection, including an overvoltage threshold protection of 140vac, and an undervoltage threshold of 95vac. Upon a brownout, overvoltage, or loss of power, the Outdoor XUPs-600C will transfer to battery in less than 4 milliseconds, enabling uninterrupted operation of your telecom, surveillance systems, signaling or other outdoor systems.

LEDs provide visual assessment of UPS status. By unlatching the two latches, the front door swings open; inside the cabinet, an array of LED status indicators and power on/off control switch are provided.



Typical applications

This heavy duty outdoor UPS system 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 remote terminal units (RTUs).

Key Outdoor XUPs features

- Cabinet can be pedestal (ground), pole, or wall mounted
- Full weather outdoor protection IP44 (NEMA-3R) metal cabinet
- Pure sine wave output
- Automatic voltage regulation with over/under voltage protection
- Remote power on/off (optional)
- Wide temperature batteries
- Heavy-duty surge protection and noise filtering
- Status bargraphs array for voltage, load and battery levels
- Two year warranty on electronics, parts and labor; manufacturer's warranty on batteries



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Outdoor XUPs



Wide temperature outdoor line-interactive UPS with automatic voltage regulation



Ac input and UPS output cable entry (two liquid-tight cable glands)



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Specification	OutdoorXUPs-600C
Electrical	
Capacity in VA (watts)	600 VA (420 watts)
UPS topology	High efficiency line-interactive with 20 kHz PWM sine wave inverter.
Input	
Nominal voltage	120 vac
Input current	5 amperes maximum @ 115 vac
Operating voltage	95–140 vac, without using batteries.
Operating frequency	47–63Hz
Output	
Nominal voltage	115 vac
Voltage regulation	115 vac +/-8% for mains ac & battery modes, all operating conditions.
Crest ratio	3:1
Output waveform	Pure sine wave, less than 3% THD with linear load.
Power efficiency	97%, under full load conditions.
Power on/off switch	On/off rocker style power switch.
Transfer time	<4 milliseconds
Batteries	Six wide temperature sealed gel-cells -20° to +60°C (-4° to +140°F); -40° to +60°C (-40° to +140°F) with optional battery heater.
Battery backup time	Eleven (11) hours @ 400 watts load.
Recharge time	Recharge time: 48 hours to 90% capacity after full discharge.
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 (most such external devices support 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 LED load level indicator: 0 to 100% of rated load. 5 LED battery charge level indicator from 0 to 100% of rated charge. 3 LED indicators for: in boost, buck or normal mode. 3 LED indicators for: inverter on/off, battery fault, and overload.
Input/output connections	Three position terminal blocks provided for 3 x 1.5mm ² (16 AWG) via 25mm (1") liquid-tight cable glands.
Physical	
Dimensions	609mm (24") wide x 305mm (12") deep x 914mm (36") high
Weights	200kg (440 lbs)
Steel cabinet	Full weather IP44 (NEMA-3R) outdoor design.
Mounting options	Bolting or banding mountable to monopole via optional 'H' style bracket (steel mounting bands not included), pedestal (ground) or wall mountable. Four wall mounting 'feet' are included.
Environmental	
Operating temperature	-20° to +60°C (-4° to +140°F); -40° to +60°C (-40° to +140°F) with optional battery heater. Includes thermostat controlled exhaust fan.
Moisture protection option	Optional conformal coating of electronic boards is available for moisture resistance to protect against high humidity environments.
Warranty	
Warranty	Two year limited warranty, parts and labor (depot). One year manufacturer's warranty on batteries.

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.



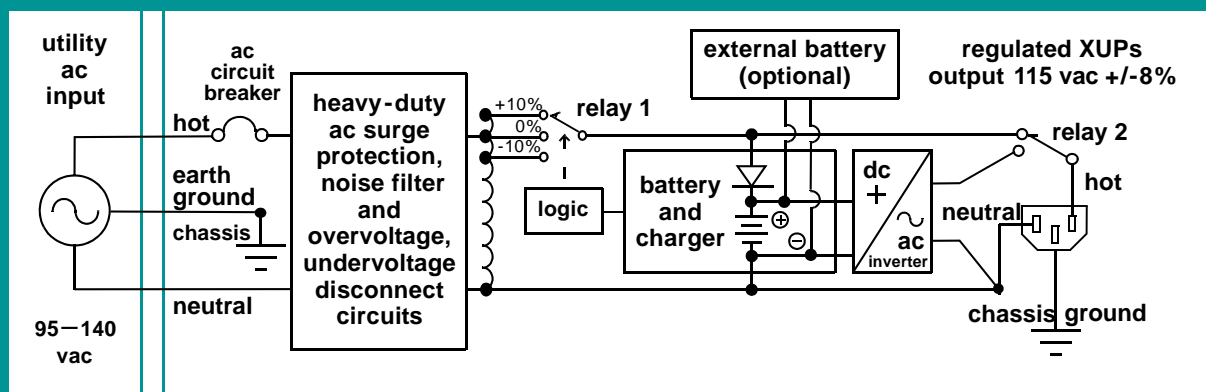
Outdoor
XUPs



optional bandable or
boltable monopole
mounting brackets



OutdoorXUPs-600A/B system architecture



OutdoorXUPs-600C at a glance:

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

- **11 hours @ 400 watts with the OutdoorXUPs-600C**
- Wide ambient temperature range sealed gel-cell batteries: -20° to +60°C (-4° to +140°F); or -40° to +60°C (-40° to +140°F) with optional thermostat controlled battery heater
- Microprocessor-controlled 20 kHz PWM sine wave inverter
- 115 vac +/- 8% output from 95–140 vac input without going to batteries
- Weather protected IP44 (NEMA-3R) metal cabinet
- SNMP compatible (optional)
- Less than 4ms transfer time
- 24 vdc battery bus
- Thermostat controlled fan



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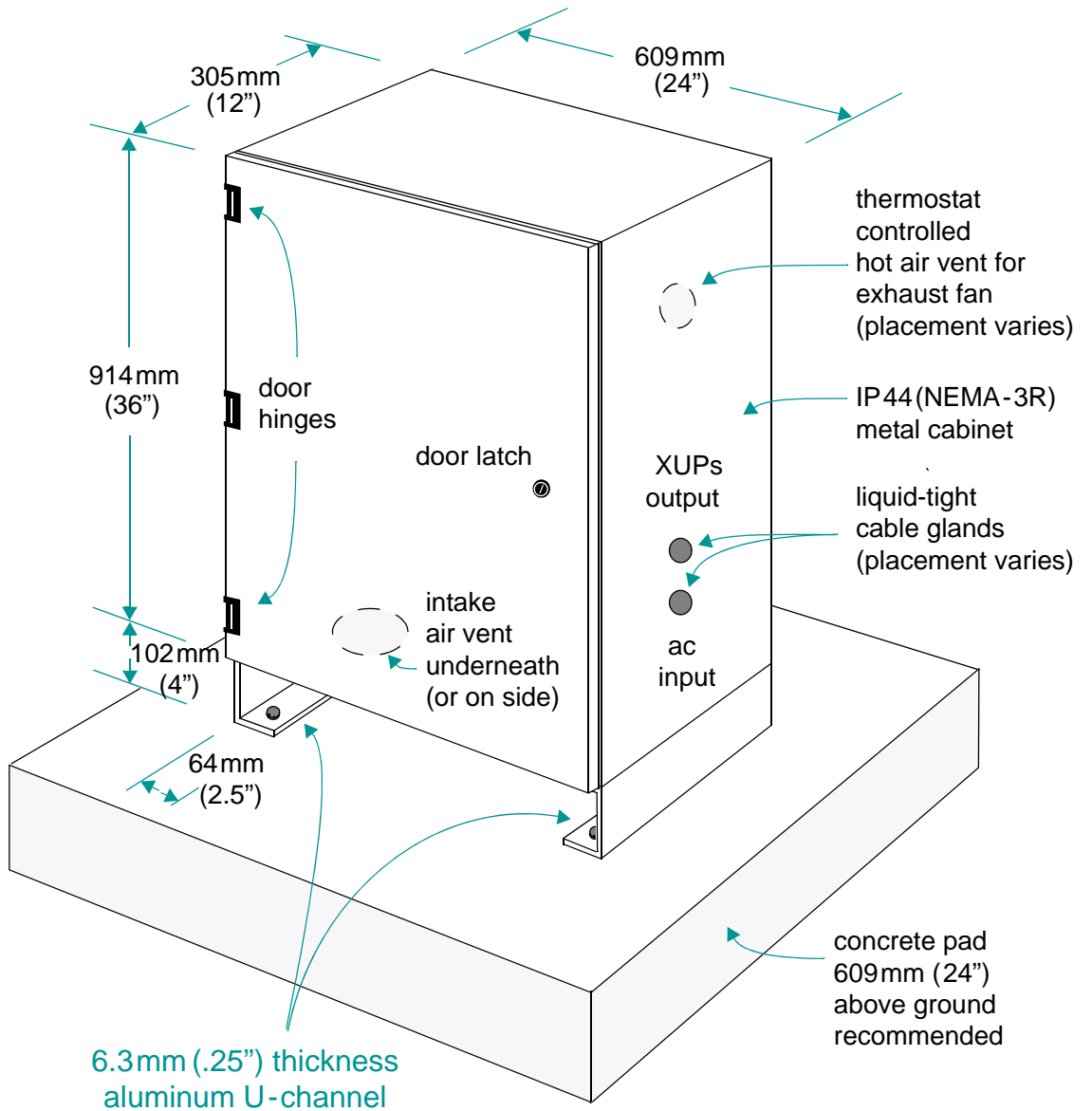
Outdoor XUPs



Mounting on a concrete pad with U-channel

Following is a drawing of a recommended pedestal/concrete pad mounted installation using the TSi Power aluminum U-channel mounting brackets. When ordered with these, the units will come with them already bolted to the bottom of the cabinet. There are four pre-drilled bolt holes that will then allow bolting of the unit to a concrete pad or other mounting surface, such as a Quazite® pad or Unistrut®.

Outdoor XUPs pad mounted



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