

Outdoor XUPs

Pure sine wave

wide temperature batteries

voltage regulation

Outdoor XUPs and EXt model

XUPs-600-6339

600 VA
480 watts
120/240V input
120V output
40 min @480W
-20° to +60°C;
-40° to +60°C
with optional
battery heater

EXt-6369

For 600 VA or
a 480 watts
load: adds
80 min @480W
-20° to +60°C;
-40° to +60°C
with optional
battery heater

Outdoor UPS with voltage regulation

The XUPs-600-6339 outdoor 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 power pole 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, extended battery backup, and 'hotel' capability for OEMs.

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 -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. Battery run-times for the outdoor XUPs-600-6339 are approximately 40 minutes at 480 watts load; the optional EXt-6369 provides an additional 80 minutes.

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
- Comprehensive array of status bargraphs for voltage, load and battery levels
- Two year warranty on electronics; manufacturer's battery warranty



TSi Power Corporation
1103 West Pierce Ave
Antigo, WI 54409 USA
800 874 3160 (USA only)
Phone +1 715 623 0636
Fax +1 715 623 2426
sales@tsipower.com
www.tsipower.com
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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	XUPs-600-6339
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	UPS: 5A @ 120 vac. Convenience outlet: 15A @ 120vac.
UPS operating voltage	95 – 140 vac (within which UPS will not have to use batteries).
Frequency	47 – 63 Hz.
Main electric service connect capability	Unit can be combined with utility type meter can if required, and internal provision for NG bond is available when used for main service.
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	97%, under full load conditions
Power on/off switch	On/off rocker style power switch
Transfer time	<4 milliseconds
Batteries	Two 32 amp hours, 12 vdc wide temperature sealed gel-cells rated for -20° to +60°C (-4° to +140°F); -40° to +60°C (-40° to +140°F) with optional battery heater.
Battery backup time and recharge time	40 minutes @ 480 watts load. 2 hours @ 240 watts load. 8 hours to 90% capacity after full discharge.
Optional extra battery pack(s) for longer backup time (heater optional)	Optional matching size EXT-6369 extra battery cabinet available with SB50 connector. Provides extra four 12 vdc, 32Ah wide temperature batteries for an extra 80 minutes of run-time @ 480W load. 24 hours to 90% capacity after full discharge. Weight: 55kg(120 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.
Output connections	Two (2) switched UPS output circuits for a combined maximum 4A, and one (1) switched 15A convenience outlet.
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	508mm(20") high x 406mm(16") wide x 203mm(8") deep
Weight	45kg(100 lbs)
Steel cabinet	Full weather IP44(NEMA-3R) outdoor design in gray color.
Mounting options	Pole mountable (steel bands optional for steel monopole mounting), pedestal (ground) or wall mountable. "H" style bracket included.
Environmental	
Operating temperature, battery heater option	-20° to +60°C (-4° to +140°F) ambient air temperature. -40° to +60°C (-40° to +140°F) with optional battery heater.



bottom inside view



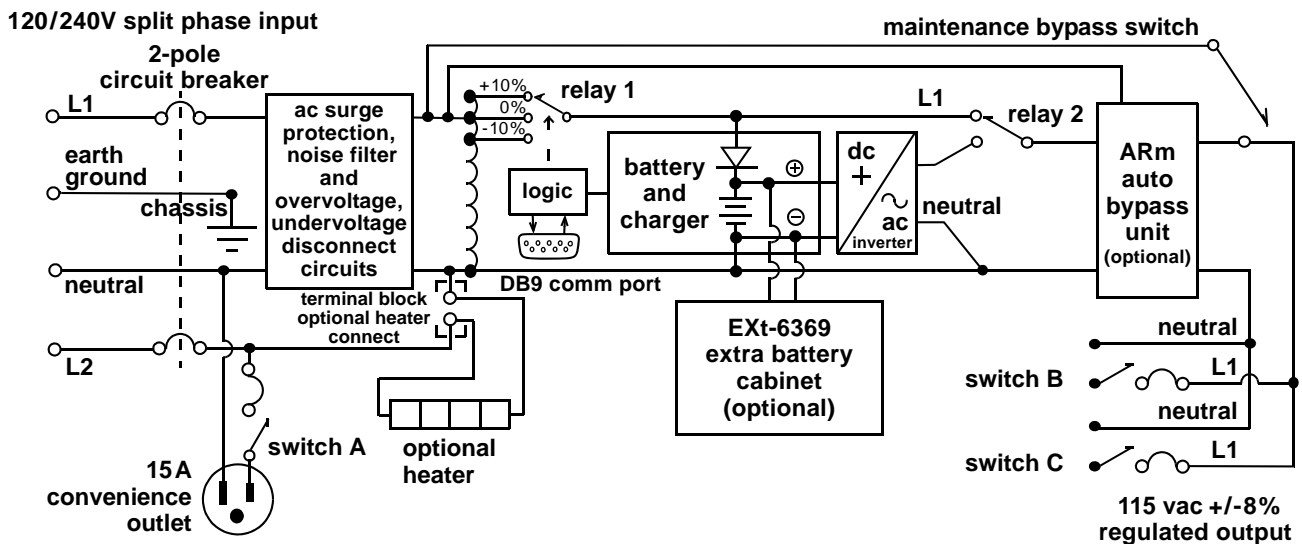
top inside view

input terminal blocks

input breaker, 2 switched UPS output circuits; and one 15A convenience outlet

one size of OEM "hotel" area
internal status LED panel

XUPs-600-6339 system architecture



XUPs-600-6339 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: -20° to +60°C (-4° to +140°F); or -40° to +60°C (-40° to +140°F) with optional thermostat controlled battery heater
- **40 minutes @ 480 watts load**
- **120 minutes @ 480 watts load** with the addition of an EXt-6369
- 115vac +/- 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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Outdoor XUPs



Mounting on a pole with steel bands or bolts

Following are two pictures showing the 'H' style mounting bracket on the rear of the Outdoor XUPs Series unit. This bracket facilitates mounting to a standard pole via the two bolt holes in the center U channel, or to a steel monopole with optional steel bands through the two sets of steel band slots in the sides of the U channel.

The Outdoor XUPs cabinet (or OutdoorExt cabinet) is mounted to the 'H' style bracket with four (4) mounting feet at the four (4) corners.

For detailed information on the optional steel bands, please call.

holes for
25mm (1")
liquid-tight
cable glands



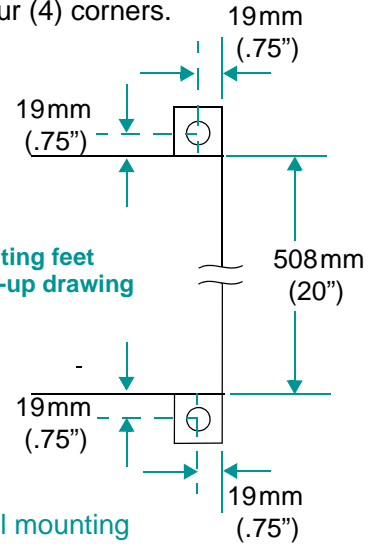
IP44 (NEMA-3R)
metal cabinet

center aligned
bolt holes for
standard pole
mounting

minimum height
609mm (24")
above ground
recommended

Mounting feet
close-up drawing

steel mounting
band slots



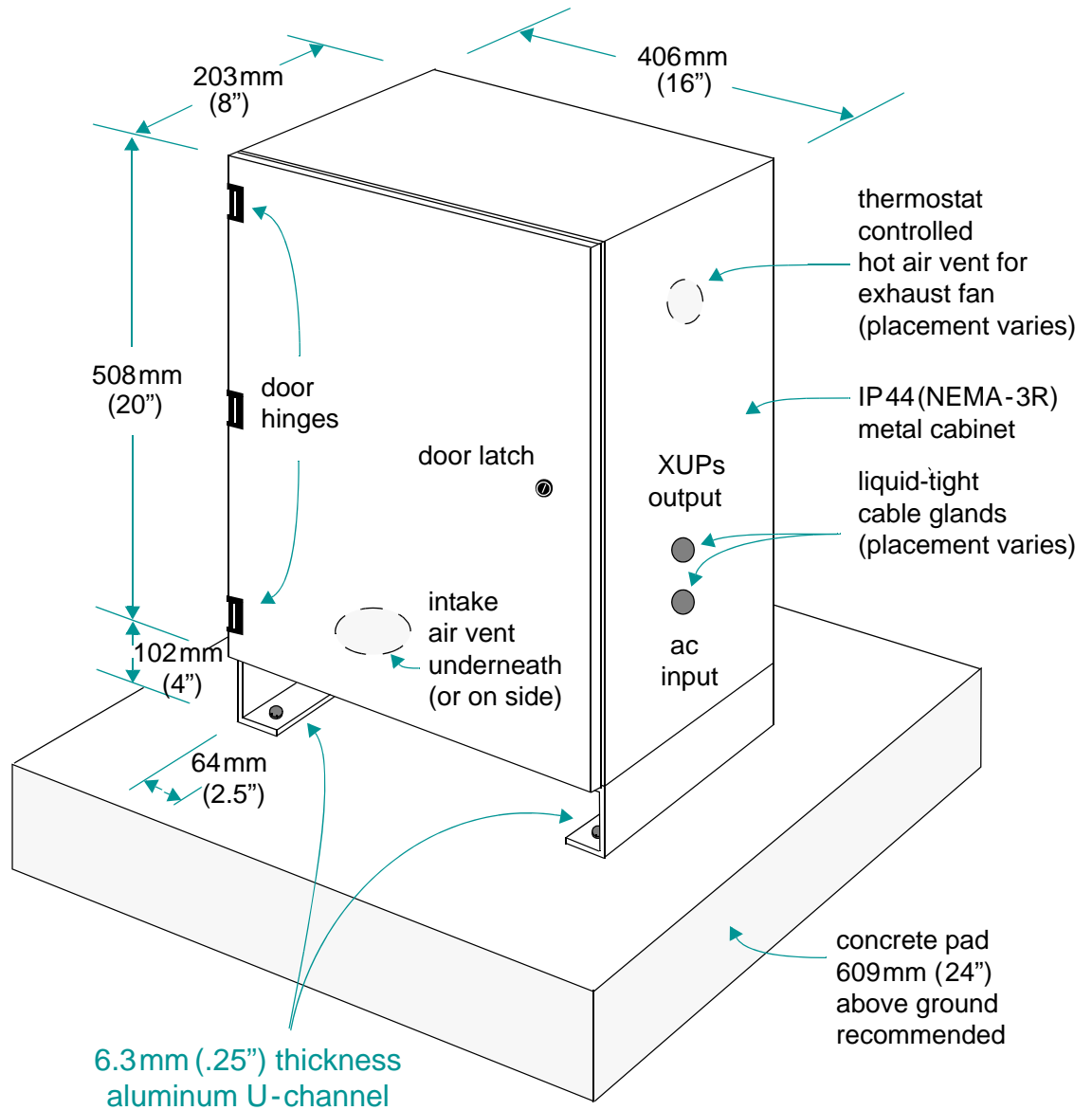
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Mounting on a concrete pad with U-channel

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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