



Pure sine wave

Wide temperature batteries

Voltage regulation

Outdoor XUPs  
model

1200B-0780

1050 watts  
1500 VA  
115 vac  
2.1 hrs @ 1050W  
-10° to +50°C;  
-40° to +50°C  
with optional  
battery heater

1200B-0780  
w/EXt Battery  
Cabinet

4.5 hrs @ 1050W

## Outdoor UPS with voltage regulation

TSi Power Outdoor XUPs-1200B-0780 units are constructed with wide temperature batteries, and are housed in a weather protected NEMA-3R enclosure. These units offer line-interactive automatic voltage regulation, over/under-voltage protection, surge protection with heavy duty noise filtering, communications capability and optional extended battery backup.

### Key Outdoor XUPs benefits

This rugged UPS design, with microprocessor-controlled 20 kHz sine wave inverter and optional conformal coated boards, 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 -10° to +50°C (14° to +122°F); -40° to +50°C (-40° to +122°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.

OutdoorXUPs-1200B-0780 battery run-times are 2 hours 10 minutes at 1050 watts load, and 4 hours 35 minutes with optional EXt battery cabinet.

### 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. 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.

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



### Typical applications

This heavy duty outdoor UPS system is ideal for protection of 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 NEMA-3R metal cabinet
- Pure sine wave output
- Over/under-voltage protection
- Remote power on/off (optional)
- Wide temperature batteries
- Heavy-duty surge protection and noise filtering
- Automatic voltage regulation
- Comprehensive array of status bargraphs 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



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

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Specification	OutdoorXUPs-1200B-0780
<b>Electrical</b>	
Capacity in VA/watts	1500 VA/1050 watts
UPS topology	High efficiency line-interactive with 20 kHz PWM sine wave inverter
<b>Input</b>	
Nominal voltage	120 volts ac
Input current	14.6 amperes (maximum charging @ low line)
Operating voltage	95–140 vac without using batteries
Over-current protection	20 amperes circuit breaker
<b>Output</b>	
Nominal voltage	115 volts ac (9.1 amperes maximum)
Voltage regulation	115 vac +/-8% upon changes in line or load.
Power factor	0.7 (true non-displacement)
Output waveform	Sinusoidal, < 3% THD
Power efficiency	>95% in ac line mode; >93% in inverter mode
Power on/off switch	On/off rocker style power switch.
Transfer time	<4 milliseconds (ac line to inverter)
<b>Battery</b>	
Type	Four 12 vdc sealed gel, valve-regulated, lead-acid, maintenance free (sold separately). Wide temperature (fully charged) -60° to +60°C.
Temperature	
Capacity	73.6 Ah @ 20 hour rate per battery.
Circuit breaker	40 amperes
Weight	52.5 lbs (23.8 kg)
Dimensions	10.9"L x 6.8"W x 9.88"H (277mmLong x 173mmWide x 251 mmH)
Battery backup time (73.6 Ah/147.2 Ah*)	2 hours 10 minutes *4 hours 35 minutes: EXt battery cabinet required.
Recharge time	20 hrs (73.6 Ah) / *40 hrs (147.2 Ah) to 90% capacity after full discharge.
Battery heater pad	BH-5 - 34 watts; two to four pads required.
<b>LED Indicators</b>	
LED Indicators	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	Input: 3 position terminal blocks provided for 3 x 2.5mm <sup>2</sup> (14AWG) connections via 12mm (1/2") liquid-tight cable glands. Output: 3 position terminal blocks provided for recommended 16 AWG.
<b>Physical</b>	
Dimensions	24"(609mm)wide x 16"(406mm)deep x 24"(609mm) high.
Weight	86 lbs (39kg) without batteries; 296 lbs (134 kg) with batteries.
Steel cabinet	Full weather 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' at corners are included.
<b>Environmental</b>	
Operating temperature, battery heater option	-10° to +50°C (14° to +122°F) ambient air temperature. -40° to +50°C (-40° to +122°F) with optional BH-5 battery heater.
Moisture protection	Boards are conformal coated for moisture ingress protection.
<b>Warranty</b>	
Warranty	Two year limited warranty, parts and labor. One year battery warranty.



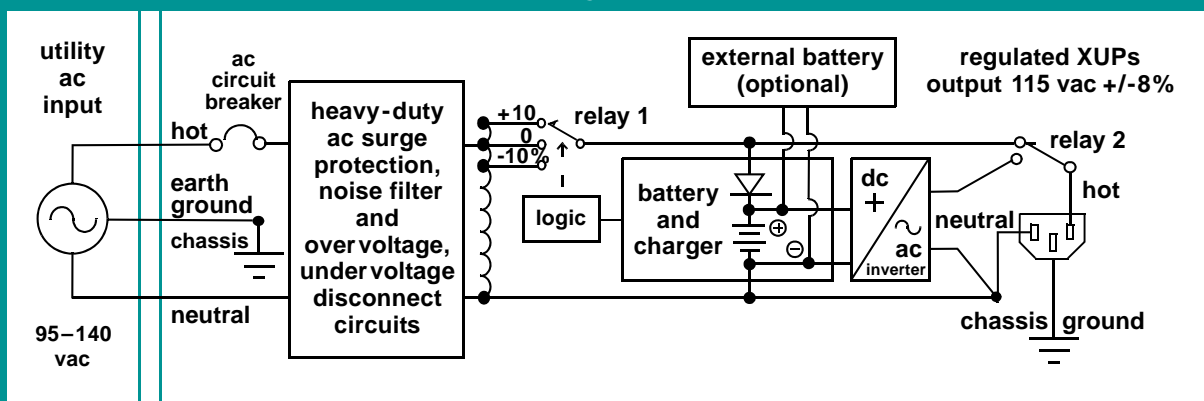
Outdoor  
**XUPs**



optional bandable or  
 boltable monopole  
 mounting brackets



### OutdoorXUPs-1200B-0780 system architecture



### OutdoorXUPs-1200B-0780 at a glance

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

- Wide ambient temperature range with sealed gel-cell batteries: -10° to +50°C (14° to +122°F); or -40° to +50°C (-40° to +122°F) with optional thermostat controlled battery heater
- 48 vdc battery bus
- **30 minutes @ 840 watts**, or 1.3 hours @ 420 watts with **the OutdoorXUPs-1200B-0780**
- SNMP compatible (optional)
- 115 vac +/- 8% output from 95–140 vac input without going to batteries
- Weather protected NEMA-3R painted metal cabinet
- Less than 4ms transfer time
- Microprocessor-controlled 20 kHz PWM sine wave inverter
- Thermostat controlled fan is included



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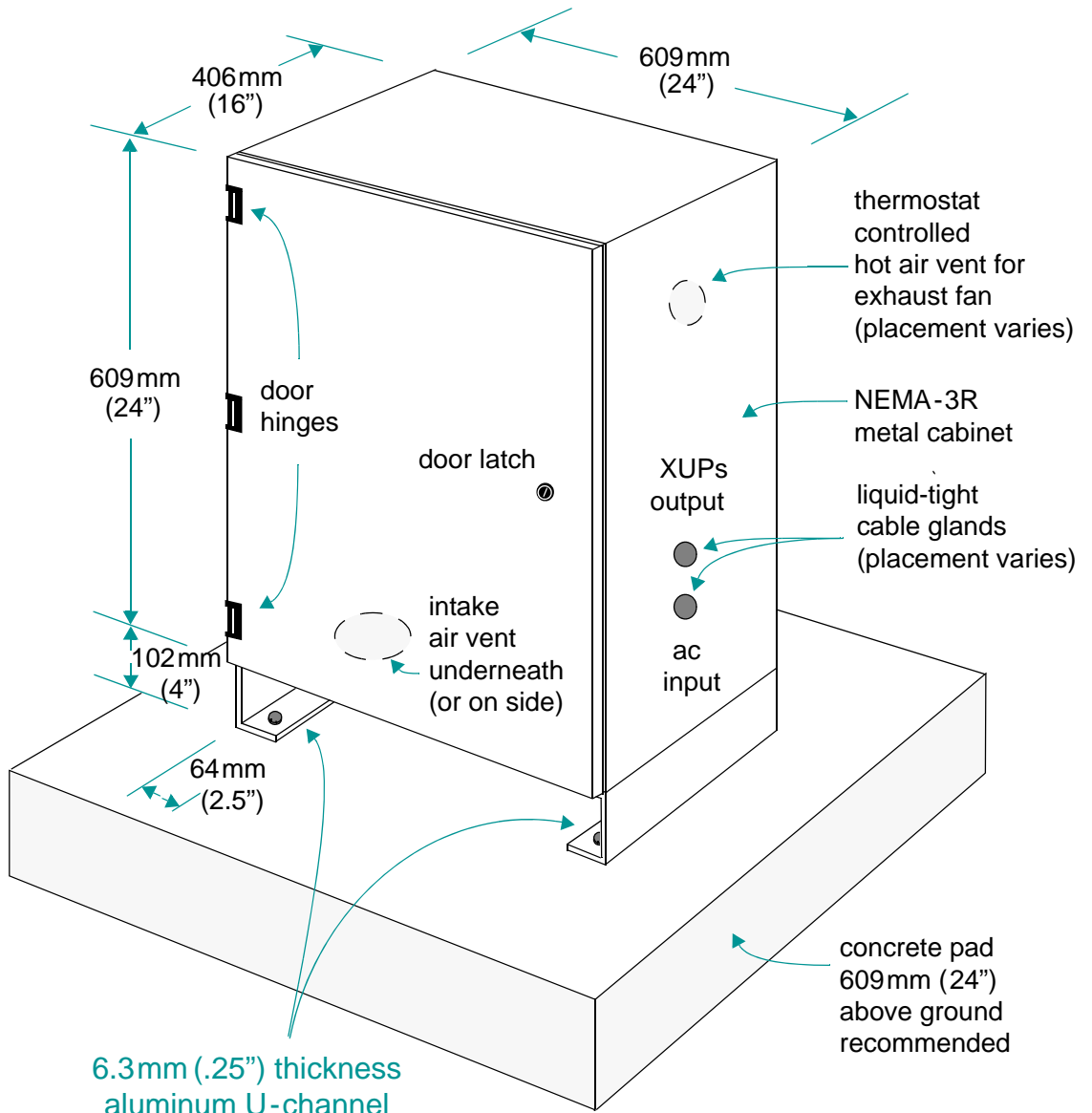
# Outdoor XUPs



## 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



(Note: drawing not to scale)



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