

Pure Sine Wave | Wide Temperature Batteries | Voltage Regulation

# XUPS

XUPS Model
2200-0760
1540 W 120 V / 230 V 1 hr backup
2200-0760
770 W 120 V / 230 V 2.9 hr backup
2200-0780
1540 W 120 V / 230 V 1.5 hr backup
2200-0780
770 W 120 V / 230 V 4.3 hr backup

## Outdoor UPS with voltage regulation

TSi Power's outdoor XUPS series is equipped with wide-temperature, pure lead, gel batteries and is housed in a weather-protected enclosure. It can be ordered in 120 V or 230 V versions and offers line-interactive automatic voltage regulation, over / under voltage protection, surge protection with heavy duty noise filtering, communications capability and optional extended battery backup.

### Typical XUPS applications

This outdoor UPS is ideal for the protection of telecom DAS systems, perimeter surveillance, security / gate control systems, LED traffic light and roadway display systems.

### How the XUPS works

The outdoor XUPS series provides automatic voltage regulation with surge protection and noise filtering, as well as, overvoltage protection with a threshold of 136 V (for 120 V system) / 272 V (for 230 V system) and undervoltage protection with

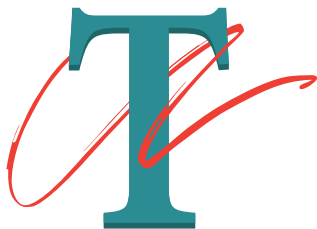


Front view showing Outdoor XUPS-2200-0780 with door open and optional pad mount brackets

a threshold of 96 V (for 120 V system) / 192 V (for 230 V system). In the event of a brownout, overvoltage, or loss of power, the XUPS will transfer to battery power quickly, enabling uninterrupted operation of the critical load.

## Features and Benefits

- Built-in automatic voltage regulation enables a wide-input voltage window to deliver power while preventing unnecessary battery drain.
- Precise output current limiting permits start of induction motors and other difficult loads.
- Cabinet can be pad, pole or wall-mounted for utmost mounting flexibility.
- Designed to UL 60950-22 standard for outdoor equipment with UL-50E rain-tested enclosure.
- The XUPS is easy to repair because internal circuit board assemblies are connectorized.
- The XUPS uses wide temperature, pure lead, gel batteries and internal cooling fan to extend battery life and protect electronic components.
- Internal bypass switch provides power if UPS fails and prevents unnecessary shutdown of connected equipment.
- LED status indicators show voltage, load and battery levels.
- Heavy-duty surge protection and noise filtering protects load and UPS.
- The XUPS includes a two-year limited warranty.
- Quiet - ideal for use in locations with noise ordinances.



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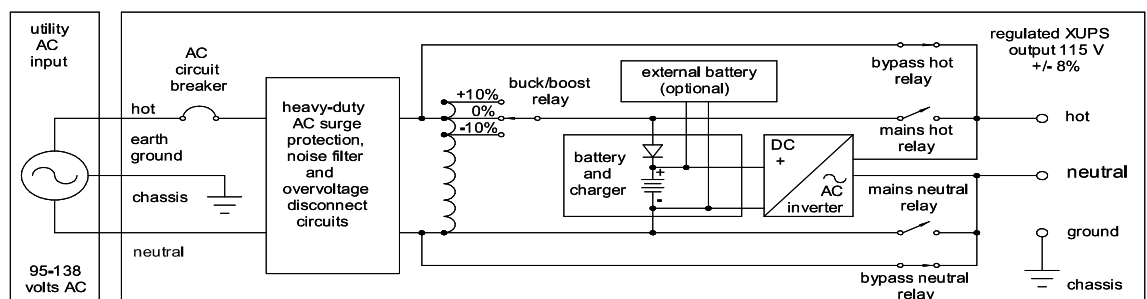
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SPECIFICATION	OUTDOOR XUPS-2200-0760	OUTDOOR XUPS-2200-0780
<b>INPUT</b>		
Nominal voltage, 120 V / 230 V system	115 V, 60 Hz / 230 V, 50 Hz	
Operating voltage, 120 V / 230 V system	96 V - 136 V (without transferring to inverter) / 192 - 272 V (without transferring to inverter)	
Current @ operating V & max charging	19.3 A / 9.7 A	
Circuit breaker	20 A / 15 A	
Surge voltage withstand	ANSI/IEEE: 6 kV, 1.2 x 50 $\mu$ s / 3k A, 8 x 20 $\mu$ s; L-N: 450 V L-G: 300 V	
<b>OUTPUT</b>		
Output power	1540 W	
Voltage 120 V / 230 V system	115 V $\pm$ 8% / 230 V $\pm$ 8%	
Crest factor	3 : 1	
Waveform and THD	Sine wave, < 3% THD with linear load	
Power efficiency	Line: 97%, Inverter: 92% under full load conditions	
Power on / off switch	On / off rocker style power switch	
Transfer time	0 to 8 milliseconds	
<b>BATTERY</b>		
Type	8G24FT	8G31DT
Dimensions and weight - W H D in/mm lbs/kg	W: 10.2 / 259 / H: 8.24 / 209 D: 6.8 / 173 52 / 23	W: 12.93 / 329 H: 9.34 / 237 D: 6.75 / 171 70 / 31.8
Ah @20hr rate and bus voltage	73.4 Ah, 48 VDC	97.6 Ah, 48 VDC
Number of batteries	4	4
Battery circuit breaker	60 A magnetic	
Temp. range fully charged - °F / °C	-4° to +140° F / -20° to +60° C (-40° to +140° F / -40° to +60° C with optional battery heater)	
Battery heater pad, Type (120 V / 230 V)	BH5 ( 34 W x2) / BH6 (34 W x2)	
Runtime	1 hr @ 1540 W / 2.9 hr @ 770	1.5 hr @ 1540 W / 4.3 hr @ 770
Recharge time to 90 %	Temperature compensated charger, charge to 90% capacity after full discharge	
	14 hours	18 hours
<b>INDICATORS AND ALARMS</b>		
LED Status indicators on control board	Inverter On: Amber, Solid; Fault On: Red, Solid; Low Batt On: Amber, Solid; Buck On: Green, Solid; Boost On: Green, Solid; AC Ok On: Green, Solid	
N / O or N / C Relay alarm contacts	AC Fail; <44 V : Low battery alarm ( Standard.-six position terminal block on control board assembly, Optional - 3 normally open DB9 female connector contacts )	
<b>PHYSICAL</b>		
Dimensions: W H D Inch / mm	W: 24 / 610 H: 24 / 610 D: 17.125 / 435	W: 28.77 / 731 H: 24 / 610 D: 17.125 / 435
Aluminum cabinet	Outdoor type, powder coated	
Input / output connections	3 position terminal block provided for 3 x 10 AWG (minimum), 1.125" holes for 3/4" conduit connectors	
Weights with batteries: lbs (kg)	315 (143)	392 (178)
Mounting option	Wall-Mount ( comes equipped w/6 mounting feet for the 0760 or w/8 mounting feet for the 0780 ); Pole-Mount ( comes equipped w/optional Pole-Mount Bracket - PM-1 for 0760 and PM-4 for 0780); Pad-Mount ( comes equipped w/optional Pad-Mount U-Channels - PAD-2 )	
<b>ENVIRONMENTAL</b>		
Operating temperature	14° to +113° F ( -10° to +45° C )	
Battery heater option	-40° to +113° F ( -40° to +45° C )	
Cooling method	Thermostat controlled exhaust fan	
Moisture protection	Conformal coating of electronic boards for moisture resistance	
<b>SAFETY</b>		
Standards	Conforms to UL 1778 Ed: 4, CSA C22.2 107.3, UL 60950-1, UL 60950-22, CSA C22.2 60950-22	
<b>WARRANTY</b>		
Warranty	Two-year limited warranty on parts and labor. Manufacturer warranty on batteries.	

TSi Power'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-2200-0760/0780 system architecture



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