

# Outdoor XUPS

Pure sine wave | Wide temperature batteries | Voltage regulation

XUPS Model
600 Batt. A
500 W 120 V 32 min backup
600 Batt. B
500 W 120 V 1.4 hr backup
1000 Batt. A
840 W 120 V 17 min backup
1000 Batt. B
840 W 120 V 45 min 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 offers line-interactive automatic voltage regulation, over/under voltage protection, surge protection with heavy duty noise filtering, communications capability and optional extended battery backup.



Front view showing Outdoor XUPS-600/1000 with door open

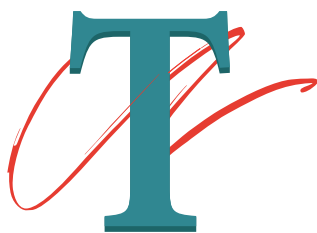
### Typical XUPS applications

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 and undervoltage protection with a threshold of 96 V. 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.



TSi POWER

1103 W Pierce Avenue  
Antigo, WI 54409 USA

Tel: + 1-715-623-0636  
Fax: + 1-715-623-2426  
Toll-Free: 1-800-874-3160

email: sales@tsipower.com  
Web: www.tsipower.com

## Features and Benefits

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

SPECIFICATION	OUTDOOR XUPS-600		OUTDOOR XUPS-1000	
<b>INPUT</b>				
Nominal voltage	115 V, 60 Hz			
Operating voltage	96 - 136 V without transferring to inverter			
Current @96 V & max charging 600 / 1000	7.8 A / 11.4 A			
Circuit breaker 600 / 1000	10 A / 15 A magnetic circuit breaker			
Surge voltage withstand	ANSI/IEEE: 6 kV, 1.2 x 50 μs / 3k A, 8 x 20 μs; L-N: 450 V L-G: 300 V			
<b>OUTPUT</b>				
Output power: 600 / 1000	500 W / 840 W			
Voltage	115 V ± 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	Battery Option A: 2 x 8GU1		Battery Option B: 4 x 8GU1	
Dimensions: L x W x H Inch / mm & weight	7.71 x 5.18 x 7.22 / 196 x 132 x 183-23 lbs/10.5 kg		8.71 x 5.18 x 7.22 / 196 x 132 x 183-23 lbs/10.5 kg	
Ah @20hr rate and bus voltage	31.6 Ah, 24 VDC		63.2 Ah, 24 VDC	
Number of batteries	2		4	
Battery circuit breaker	30 A		40 A	
Temp. range fully charged	-15° to +50° C / 5° to +122° F / -40° to +50° C / -40° to +122° F with optional battery heater			
Battery heater pad BH 5	34 W, one required		34 W, two required	
Battery backup time vs. load 600/1000 <i>* Depends on condition of battery</i>	Battery A 32 min	Battery B 1.45 hrs	Battery A 17 min	Battery B 45 min
Recharge time	Temperature compensated charger, charge to 90% capacity after full discharge			
	7 hours		10 hours	
<b>INDICATORS AND ALARMS</b>				
LED Status indicators on control board	Inverter on: Amber; Low battery: Amber after inverter shut down following low batt. after long outage; Fault: Red for overload / red blinks for high temp; AC ok: Green when AC in buck, bypass or boost mode			
N / O or N / C contacts	>22 V / <22 V / On / Off, six position terminal block on control board assembly			
<b>PHYSICAL</b>				
Dimensions: W x H x D Inch / mm	24 x 24 x 13.75 / 610 x 610 x 349			
Aluminum cabinet	Outdoor type, powder coated			
Input / output connections	3 position terminal block provided for 3 x 12 AWG, 1-1/8" holes for 3/4" conduit connectors			
Weights with batteries lbs / kg 600 / 1000	121 lbs / 54.9 kg / 123 lbs / 55.8 kg		169 lbs / 76.7 kg / 171 lbs / 77.6 kg	
Mounting option	Bolting or banding to pole via optional mounting bracket (mounting bands not included), pad (ground) with optional bottom mounted u-channel, or wall mountable via four wall mounting 'feet' which are included standard for XUPS			
<b>ENVIRONMENTAL</b>				
Operating temperature	-10° to +50° C / 14° to +122° F ambient air temperature			
Battery heater option	-40° to +50° C / -40° to +122° F with optional battery heater			
Cooling method	Thermostat controlled exhaust fan			
Moisture protection	Conformal coating of electronic boards for moisture resistance			
<b>SAFETY</b>				
Standards	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.			



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### XUPS-600/1000 system architecture

