XUPS

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 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.
### Specifications

**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**
14.2 A / 7.1 A

**Circuit breaker**
15 A / 10 A

### Output

**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

### Battery

**Nominal voltage, 120 V / 230 V system**
115 V ± 8% / 230 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

### Physical

**Dimensions and ratings**

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<tr>
<th>Specification</th>
<th>Outdoor XUPS-1500-0760</th>
<th>Outdoor XUPS-1500-0780</th>
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<tbody>
<tr>
<td>Battery circuit breaker</td>
<td>40 A magnetic</td>
<td></td>
</tr>
<tr>
<td>Battery charger</td>
<td>14 hours</td>
<td></td>
</tr>
<tr>
<td>Battery charger</td>
<td>18 hours</td>
<td></td>
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### Environmental

**Operating temperature**
14° to +113° F (-10° to +45° C)

**Battery heater option**
-40° to +113° F (-40° to +45° C)

### Safety

**Standards**
Conforms to UL 1778 Ed: 4, CSA C22.2 107.3, UL 60950-1, UL 60950-22, CSA C22.2 60950-22

### Warranty

Two-year limited warranty on parts and labor. Manufacturer warranty on batteries.

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Outdoor XUPS-1500-0760/0780 system architecture