



Pure sine wave

wide input voltage window

voltage regulation

**XUPs model**

**1500HV**

1500 VA  
1050 watts  
120 volts  
13 min @ 1050W  
35 min @ 525 W

**XBat-48V-36Ah**

1 module adds  
80 min @ 1050W  
160 min @ 525 W

## Rack-mountable sine wave UPS with AVR and a wide input voltage window

These heavy-duty UPS are housed in two rugged steel rack-mountable enclosures. One is the UPS electronic module, the other is the battery module. The XUPs offers line-interactive automatic voltage regulation, over/under-voltage protection, surge protection with heavy duty noise filtering, communications capability and optional extended battery backup.

### Key XUPs-1500HV benefits

The XUPs design, with its microprocessor-controlled 20 kHz sine wave inverter, reduces the number of solid-state devices required for power conversion, thereby yielding a high level of reliability.

Built-in automatic voltage regulation enables a wide input voltage window within which the power is delivered without having to drain or exercise the batteries, thereby ensuring long battery life. A fan exhausts hot air from the enclosure to ensure optimal temperature.

Standard run-times for the XUPs-1500HV are approximately 13 minutes at a 1050 watts load, and 35 minutes at a 525 watts load. A built-in Anderson SB50 connector enables adding extra battery cabinets for longer times.

### How the XUPs works

The XUPs Series UPS provides automatic voltage regulation with surge protection and noise filtering, overvoltage protection with a threshold of 270 vac, and undervoltage protection with a threshold of 190 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 electronic systems.

A comprehensive array of power, battery level, voltage level, and inverter status LED indicators is provided for visual assessment of UPS status. A DB-9 port is provided for communication using RS-232 or relay dry contact signals. The power on/off switch is recessed to prevent accidental turn on or off.



Note: XUPs-1500HV shown

### Typical XUPs applications

This heavy duty UPS system is ideal for protection of computers, WiFi/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 XUPs features

- Pure sine wave inverter output
- Over/under-voltage protection
- Rack-mountable with optional rack-mount kit
- Heavy-duty surge protection and noise filtering
- Automatic voltage regulation with wide voltage input window enhances long battery life
- Comprehensive array of status bargraphs for voltage, load and battery levels
- SNMP compatible via RS-232 port with optional SNMP adapter
- Both RS-232 (via DB9) and relay contact signals are provided
- Two year limited warranty on electronics, parts and labor; one year warranty on batteries



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# XUPs



(XUPs-1500HV shown)

Rack-mountable heavy-duty line-interactive UPS with automatic voltage regulation

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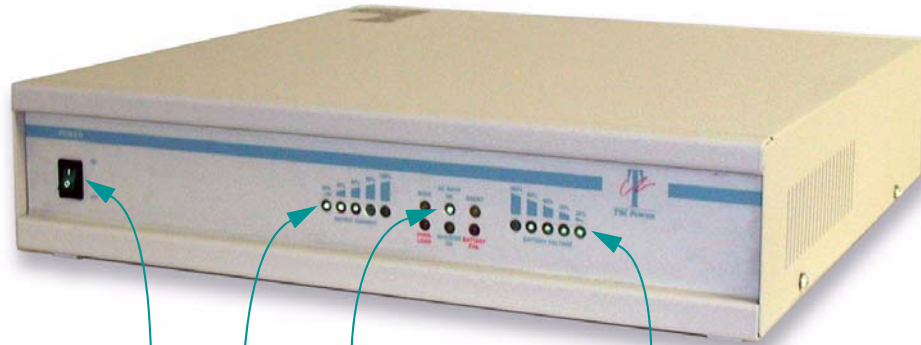
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Specification	XUPs-1500HV and XBat-48V-36Ah
<b>Electrical</b>	
Capacity in VA (watts)	1500 VA (1050 watts)
UPS topology	High efficiency line-interactive with 20 kHz PWM sine wave inverter.
<b>Input</b>	
Nominal voltage	120 volts ac
Input current	6.5 amperes maximum @ 120 vac
Operating voltage. Freq.	190–270 vac without using batteries. 47–63Hz.
Input receptacle/plug	IEC320 input receptacle. Six foot line cord with IEC320 plug.
<b>Output</b>	
Nominal voltage	230 volts ac
Voltage regulation	230 vac +/-8% upon changes in line or load.
Maximum output	1050 watts (230 vac, 4.5 amperes)
Output waveform	Pure sine wave, less than 3% THD with linear load.
Power efficiency	97 %, under full load conditions.
Power on/off switch	Recessed on/off rocker style power switch.
Transfer time	<4 milliseconds
XUPs-1500HV backup	13 minutes @ 1050 watts load, 35 minutes @ 525 watts load.
XUPs-1500HV batteries	48V, 12Ah maintenance-free sealed lead-acid batteries.
XUPs-1500HV recharge	6 hours to 90% capacity after full discharge. (XBat time is additive).
XBat-48V-36Ah backup	80 minutes @ 1050 watts load, 160 minutes @ 525 watts load.
XBat-48V-36Ah recharge	12 hrs to 90% capacity after full discharge (per each XBat-48V-36Ah).
For longer backup times: up to four XBat-48V-36Ah modules can be added	Up to four total matching XBat-48V-36Ah battery packs can be daisy-chain connected to one XUPs-1500HV via Anderson SB50 connectors. (E.g. with four XBat-48V-36Ah battery modules, battery runtime will be approx. 5.5 hours at 1050W load, and 11 hours for a 525W load.) <i>Note: OEMs can also add custom batteries, please call to discuss.</i>
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 (most such external devices support TCP/IP, UDP, SNMP, Telnet, SNMP, PPP, HTTP & SMTP protocols).
Surge protection	Ac input surge/noise filter (using inductor, capacitor and MOV).
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.
Output receptacles	Eight standard NEMA 5-15R receptacles. For others please call.
<b>Physical</b>	
Dimensions - 1500HV: XBat-48V-36Ah cabinet:	429mm (16.9") wide x 559mm (22") deep x 115mm (4.5") high 429mm (16.9") wide x 559mm (22") deep x 115mm (4.5") high
Weights	XUPs-1500HV: 34 kg (75 lbs). XBat-48V-36Ah module: 59 kg (130 lbs)
Housing	Painted steel enclosure with rubber feet.
Optional rack/cabinet mounting kits	Front pair: 19" rack: # MK-8019A, 23" rack: #MK-8023A Center pair: 19" rack: # MK-8019F, 23" rack: #MK-8023F
<b>Safety</b>	
Agency standards	Designed to meet UL, cUL and IEC safety standards.
<b>Environmental</b>	
Operating temperature	0° to 40°C (32° to 104°F). 10 to 90% relative humidity (non-condensing).
<b>Warranty</b>	
Warranty	Two year limited warranty, parts and labor; one year battery warranty.



Please note: this page shows only the primary XUPs-1500HV.  
 The matching XBat-48V-36Ah battery module has the same dimensions as the XUPs-1500HV.

## Front-right view



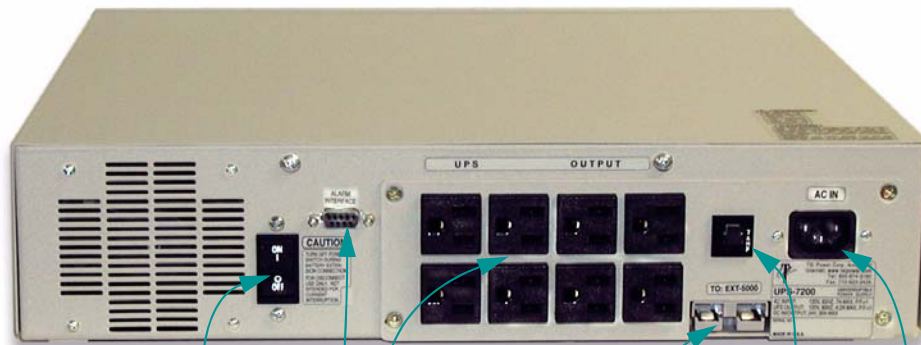
recessed on/off switch

UPS output current: three of five LEDs showing XUPs is 60% loaded

- ac input on LED lit
- buck mode
- boost mode
- overload
- inverter on/off
- battery failure

battery voltage level: four of five LEDs showing batteries at 80% charge status

## Rear view



40A dc circuit breaker

DB-9 communication port provides both RS-232 and relay alarm contact signals (or SNMP using optional SNMP adapter)

output ac via four IEC 320 receptacles (*NEMA 5-15R receptacles shown*)

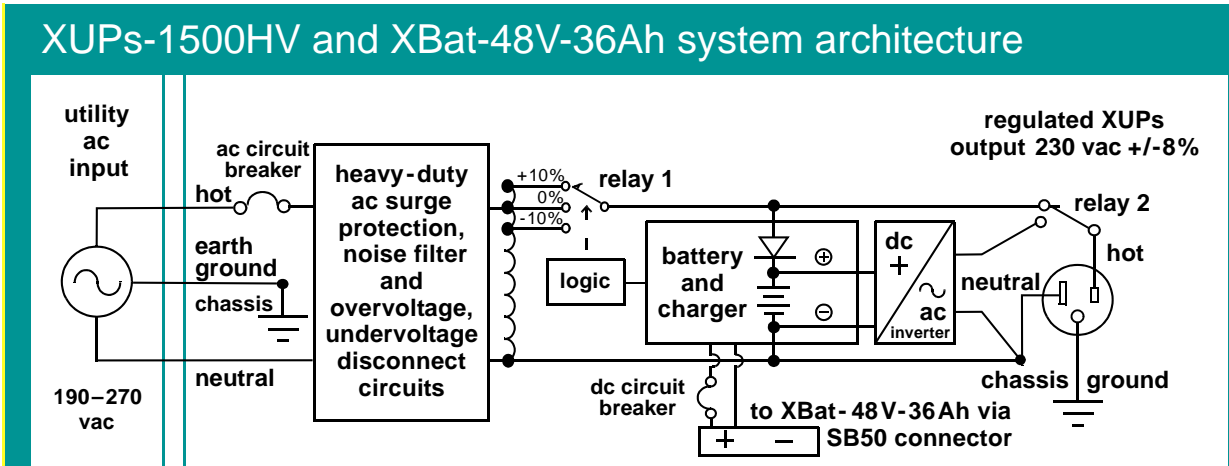
dc Anderson SB-50 battery connector connects to the XBat-48-36Ah battery module (up to a total of four XBat-48V-36Ah modules may be daisy-chain connected to an XUPs-1500HV)

input 7A ac circuit breaker

input ac IEC 320 receptacle for 6 foot cord with IEC 320 plug (also accepts other cord/plug sets)



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## XUPs-1500HV and XBat-48V-36Ah

Rack-mountable heavy-duty UPS and battery module with line-interactive automatic voltage regulation and wide input voltage window

- Battery backup times with XUPs-1500HV:  
13 minutes @ 1050 watts load  
35 minutes @ 525 watts load
- A built-in Anderson SB50 connector enables adding extra battery packs for longer times
- Up to four XBat-48V-36Ah battery modules may be connected to one XUPs-1500HV
- Battery backup times with four XBat-48V-36Ah modules:  
5.5 hours @ 1050 watts load  
**11 hours @ 525 watts load**
- 230 vac +/-8% output from 190–270 vac input without going to batteries
- Rack-mountable metal cabinet allows for rack-mounting using optional mounting kits
- Less than 4 ms transfer time
- SNMP compatible with optional SNMP adapter
- 48 vdc battery bus
- Microprocessor-controlled 20 kHz PWM sine wave inverter



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