



Pure sine wave

wide input voltage window

voltage regulation

XUPs model

2000HV

2000 VA
1400 watts
230 volts
10 min @ 1400W
25 min @ 700 W

XBat-48V-36Ah

1 module adds
60 min @ 1400W
120 min @ 700 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-2000HV 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-2000HV are approximately 10 minutes at a 1400 watts load, and 25 minutes at a 700 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-2000HV 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-2000HV shown)

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

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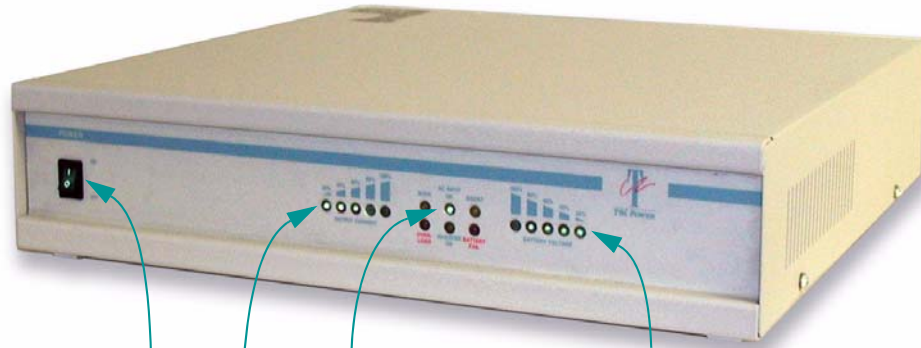
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Specification	XUPs-2000HV and XBat-48V-36Ah
Electrical	
Capacity in VA (watts)	2000 VA (1400 watts)
UPS topology	High efficiency line-interactive with 20 kHz PWM sine wave inverter.
Input	
Nominal voltage	230 volts ac
Input current	8 amperes maximum @ 230 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.
Output	
Nominal voltage	230 volts ac
Voltage regulation	230 vac +/-8% upon changes in line or load.
Maximum output	1400 watts (230 vac, 6.1 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-2000HV backup	10 minutes @ 1400 watts load, 25 minutes @ 700 watts load.
XUPs-2000HV batteries	48V, 12Ah maintenance-free sealed lead-acid batteries.
XUPs-2000HV recharge	6 hours to 90% capacity after full discharge. (XBat time is additive).
XBat-48V-36Ah backup	60 minutes @ 1400 watts load, 120 minutes @ 700 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-2000HV via Anderson SB50 connectors. (E.g. with four XBat-48V-36Ah battery modules, battery runtime will be approx. 4.2 hours at 1400W load, and 8.5 hours for a 700W 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.
Physical	
Dimensions - 2000HV: 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-2000HV: 36 kg (80 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
Safety	
Agency approvals	Designed to meet UL, cUL and IEC safety standards.
Environmental	
Operating temperature	0° to 40°C (32° to 104°F). 10 to 90% relative humidity(non-condensing).
Warranty	
Warranty	Two year limited warranty, parts and labor. One year battery warranty.



Please note: this page shows only the primary XUPs-2000HV
 The matching XBat-48V-36Ah battery module has the same
 dimensions as the XUPs-2000HV.

Front-right view



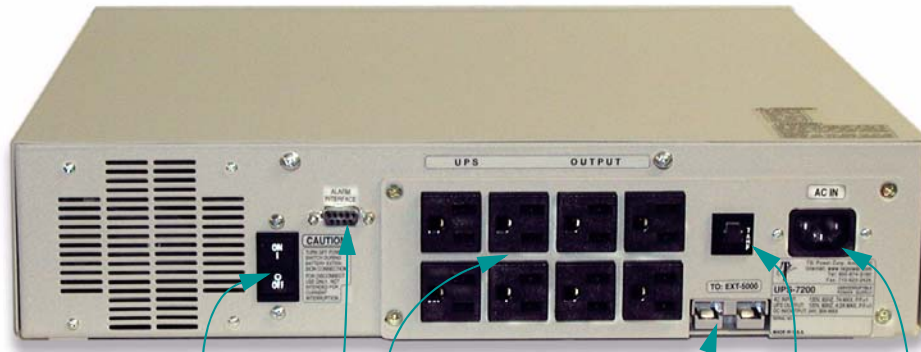
recessed
 on/off switch

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*)

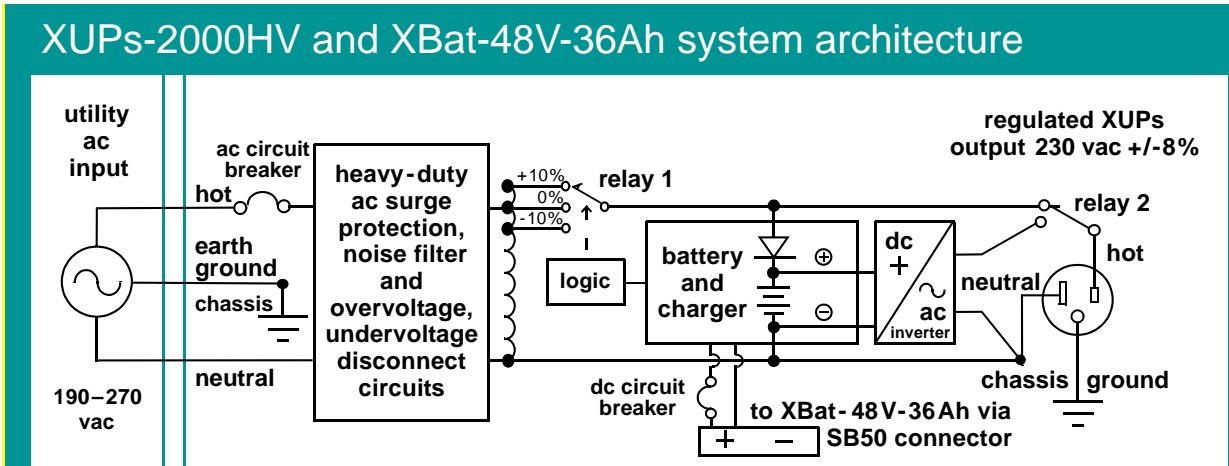
dc Anderson SB-50
 battery connector
 connects to the
 XBat-48-36Ah battery
 module (up to a total of
 four XBat-48V-36Ah
 modules may be daisy-
 chain connected to an
 XUPs-2000HV)

input 8A 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-2000HV 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-2000HV:
10 minutes @ 1400 watts load
25 minutes @ 700 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-2000HV
- Battery backup times with four XBat-48V-36Ah modules:
4.2 hours @ 1400 watts load
8.5 hours @ 700 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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