

# Audio/Video Pure Sine Wave UPS

On-Line, Double-Conversion, Pure Sine Wave Power Management System



## Model #: HTR10-2U

- ▶ 1000VA on-line, double-conversion, extended-run UPS; rackmount ears included
- ▶ 6 outlets; 2 switchable load banks
- ▶ Maintains sine wave 110 or 120V +/-2% output during overvoltages to 138 and brownouts as low as 65V (50/60Hz auto-sensing)
- ▶ Fault-tolerant auto-bypass mode, current monitoring and switched PDU control
- ▶ Simultaneous communications via HID-compliant USB port, serial port and SNMPWEBCARD slot
- ▶ 2-year warranty; \$250,000 Ultimate Lifetime Insurance (USA & Canada only)

## DESCRIPTION

Tripp Lite's HTR10-2U Pure Sine Wave 1000VA on-line, double-conversion UPS system prevents media data loss, equipment freeze-ups, downtime and equipment damage due to power outages, voltage fluctuations and transient surges. Provides full-time sine wave 100, 110 or 120V +/-2% output with zero transfer time between AC and battery operation. Actively converts raw incoming AC power to DC, then re-converts output back to completely regulated, filtered AC output. Operates continuously without using battery power during brownouts to 65V and overvoltages to 138V. Network-grade AC surge and EMI/RFI line noise suppression. Dataline surge suppression for a dialup, DSL or network Ethernet connection. Requires only 2 rack spaces (2U); upright tower installation supported with optional 2-9USTAND accessory. Large internal batteries provide 18 min. half-load runtime and 6 min. full load runtime; runtime is expandable with optional BP48V24-2U and BP48V60RT-3U external battery packs. 1000VA/800W power handling capacity is compatible with audio/video components and other sensitive electronic applications. Includes 6 UPS-supported outlets arranged in two switchable load banks that can be individually controlled via software interface to reboot selected equipment on demand or automatically shed less significant loads to extend battery runtime for more critical equipment. Supports simultaneous communications via USB port, DB9 serial port and SNMPWEBCARD slot for the ultimate in IP addressability and monitoring. HID-compliant USB interface enables integration with built-in power management and auto-shutdown features of Windows, Mac OS X and Linux. Supports simultaneous detailed monitoring of equipment load levels, self-test data and utility power conditions via all 3 network interfaces. Includes PowerAlert monitoring software and complete cabling. Multi-function audible alarms and front-panel LEDs provide at-a-glance notification of UPS and line power status. Attractive all-black color scheme. 2-year warranty; \$250,000 connected equipment insurance (USA & Canada only)

## KEY BUYING POINTS

- HTR10-2U Pure Sine Wave UPS provides perfectly regulated sine wave output within 2% of 110/120V (user selectable) under all usage conditions
- 1000VA/800W power handling capacity compatible with micro display devices, projectors, PVRs/DVRs, media center PCs, music servers and other sensitive electronics
- Removes harmonic distortion, fast electrical impulses, frequency variations and other hard-to-solve power problems not addressed by other UPS types
- Corrects line voltage conditions as low as 65V and as high as 138V back to selectable 110/120V (+/-2%) values
- 2 switchable load banks (2 outlets bank one / 4 outlets bank two) enable remote outlet management for load shedding or remote reboot of individual devices
- Single-line tel/DSL/Ethernet surge suppression
- Internal battery set offers 22 min. runtime at half load (400W) and 12 min. at full load (800W)
- Optional BP48V24-2U (limit 1) and BP48V60RT-3U (no limit) external battery pack increases runtime
- Fault-tolerant auto-bypass maintains continuous utility output to connected equipment, even in cases where the UPS suffers internal failure and requires maintenance
- Compact rackmount form factor installs in 2 rack spaces (2U) with a maximum installed depth of only 19 in.

- Offers simultaneous monitoring by up to 3 directly connected devices through included USB, DB9 and SNMP\* interfaces (\*requires optional SNMPWEBCARD), or the monitoring of any number of additional UPS systems over IP with included PowerAlert monitoring software
- HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows, Mac OS X and Linux
- PowerAlert UPS monitoring and unattended shutdown software enables configurable network broadcast messaging, pager and email notification, event logging and running user-defined script commands
- Front panel LEDs offer current monitoring and battery charge level information
- UPS ships fully assembled in full compliance with DOT regulations; no time-consuming connection of internal batteries by user required
- 2-year warranty; \$250,000 Ultimate Lifetime Insurance (USA & Canada only)

## TYPICAL APPLICATIONS

- Ideal for protection of home theater/media center components and other sensitive electronic equipment, including micro display devices, PVRs/DVRs, media center PC/servers, VoIP telephony systems, home automation/control systems and security equipment

## OPTIONS & ACCESSORIES

- External battery pack: [BP48V24-2U](#), [BP48V60RT-3U](#)
- SNMP accessories: [SNMPWEBCARD](#), [ENVIROSENSE](#)
- Dataline protectors: [DNET1](#), [DTEL2](#), [DCATV](#)
- Circuit Tester: [CT120](#)
- Rack enclosures: [Rack Systems](#)
- Power distribution: [PDU1215](#), [PS7224](#)
- Two Post Rackmount/Wallmount Kit: [2POSTRMKITWM](#)
- Tower Stands: [2-9USTAND](#)
- Extended warranties: 3 Year [WEXT3-500-1500](#), 5 Year [WEXT5-500-1500](#)

## PACKAGE INCLUDES

- HTR10-2U Audio/Video Pure Sine Wave UPS System
- PowerAlert Software and cabling
- Mounting hardware for 4-post rack enclosures
- Instruction manual with warranty information

## COMPLETE SPECIFICATIONS

### SYSTEM OVERVIEW

#### System overview:

"HTR10-2U Audio/Video Pure Sine Wave UPS System protects connected equipment from blackouts, brownouts, surges and EMI/RFI line noise. Supports enhanced monitoring of UPS and line power conditions via built-in USB and DB9 communication ports, included PowerAlert monitoring software and complete cabling. Includes slot for SNMPWEBCARD accessory. Two controllable load management banks offer remote reboot of selected loads via software interface or automated load shedding to extend battery runtime for the most critical loads during blackouts. Expandable runtime with optional external battery packs. Supports 2U rackmount and upright tower form factors; mounting hardware for 4-post rack enclosures included."

#### Voltage compatibility:

120 VAC (110/120V)

#### Frequency compatibility:

50/60 Hz compatible (auto-sensing)

### OUTPUT

#### Output volt amp capacity (VA):

1000

<b>Output watt capacity (watts):</b>	800
<b>Output nominal voltage:</b>	120 VAC (110/120V)
<b>Output voltage regulation:</b>	Maintains full-time sine wave output within 2% of selected nominal, less than 3% total harmonic distortion (linear load) / 6% total harmonic distortion (computer load)
<b>Output frequency regulation:</b>	Regulates line frequency to 50/60Hz +/- 0.05Hz
<b>Outlet quantity / type:</b>	6 x NEMA 5-15R
<b>Customized load management receptacles:</b>	2 controllable load banks support automated load shedding and remote reboot on demand of locked network devices.
<b>Overload protection:</b>	20A input breaker

## INPUT

<b>Maximum input amps:</b>	8.6A (120V) / 9.2 (110V)
<b>Input connection type:</b>	NEMA 5-15P
<b>Input cord length:</b>	6 ft.
<b>Recommended electrical service:</b>	15A 120V

## BATTERY

<b>Full load runtime:</b>	12 min. with internal batteries (800 watts)
<b>Half load runtime:</b>	22 min. with internal batteries (400 watts)
<b>Expandable battery runtime:</b>	Supports extended runtime with optional external battery packs BP48V24-2U (limit 1) and BP48V60RT-3U (multi-pack compatible)
<b>DC system voltage:</b>	48VDC
<b>Typical battery lifespan:</b>	3-6 years, depending on usage
<b>Battery recharge rate:</b>	Less than 6 hours to 80%
<b>Replacement Battery Cartridge:</b>	RBC94-2U

## VOLTAGE REGULATION

<b>Voltage regulation description:</b>	On-line, double-conversion power conditioning maintains output within 2% of 110/120 volts at all times
<b>Overvoltage correction:</b>	Maintains output of selected nominal +/-2% during overvoltages to 138V AC
<b>Brownout correction:</b>	Maintains output of selected nominal +/-2% during undervoltages to 65V AC (at loads greater than 70% undervoltage correction extends to 80V)

## LEDS ALARMS & SWITCHES

<b>Front panel LEDs:</b>	LED STATUS DISPLAY: line power (green), online (green), bypass (yellow), on battery (green), overload (red), battery low (yellow) - 4 LED LOAD / BATTERY LEVEL DISPLAY (100%, 75%, 50%, 25%)
<b>Alarms:</b>	Multi-function audible alarm with distinctive ring patterns offer notification of backup operation (2 sec. on / 0.5 sec. off), low battery warning (1.25 sec. on / 0.5 sec. off), overload (sounds continuously), UPS fault (4.2 sec. on / 1 sec. off), input voltage out of frequency (2.1 sec. on / 0.14 sec. off) and high input voltage (2.1 sec. on 0.07 sec. off)
<b>Switches:</b>	Includes power off/on switch to enable system turn on (press ON switch), UPS battery test (press ON switch during normal AC operation), buzzer silence (press ON switch during battery operation) and OFF (press OFF switch) - all switch functions require tha

## PHYSICAL

<b>Shipping weight (lbs):</b>	54
<b>Shipping weight (kg):</b>	24.5
<b>Unit weight (lbs):</b>	44.1
<b>Unit weight (kg):</b>	20
<b>Unit Dimensions (HWD/in):</b>	3.5 x 17.5 x 19

<b>Unit Dimensions (HWD/cm):</b>	8.9 x 44.4 x 48.3
<b>Shipping Dimensions (HWD/in):</b>	9.5 x 20 x 24
<b>Shipping Dimensions (HWD/cm):</b>	24.1 x 50.8 x 61
<b>Material of construction:</b>	Steel
<b>Form factors supported:</b>	Rack/Tower (2U)
<b>Cooling method:</b>	Built-in cooling fan
<b>Battery Access:</b>	Hot-swap battery replacement supported via front access panel

## ENVIRONMENTAL

<b>Operating Temperature:</b>	+32 to +104 degrees Fahrenheit; 0 to +40 degrees Celsius
<b>Storage Temperature:</b>	+5 to +122 degrees Fahrenheit; -15 to +50 degrees Celsius
<b>Relative Humidity:</b>	0 to 95%, non-condensing

## COMMUNICATIONS

<b>Network monitoring port:</b>	USB and DB9 ports. Built-in DB9 port offers both enhanced RS-232 enabled monitoring data, plus contact closure monitoring ability. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows, Mac OS
<b>Software and cabling included:</b>	PowerAlert software CD-ROM and complete cabling
<b>SNMP compatibility:</b>	Slot for optional SNMPWEBCARD accessory (#SNMPWEBCARD)
<b>WatchDog compatibility:</b>	Compatible with Tripp Lite's Watchdog system service to restore operation to locked equipment through soft reboot of application / OS or hard power off/on reboot of connected equipment—ideal for unattended applications

## LINE / BATTERY TRANSFER

<b>Transfer time from line power to battery mode:</b>	Zero—online UPS continuously converts incoming AC to DC, then back to AC. When commercial power is interrupted, UPS maintains continuous output from battery reserves with absolutely no disruption in output AC power.
<b>Low voltage transfer to battery power:</b>	Maintains continuous operation during undervoltages as low as 65V (80V at load levels over 70%). Below this switchover point, output is supported from battery derived AC power.
<b>High voltage transfer to battery power:</b>	Maintains continuous operation without using battery power during overvoltages to 138V. Above this point, output is supported from battery derived AC power.

## CERTIFICATIONS

<b>Certifications:</b>	Tested to UL1778 (USA), CSA (Canada), NOM (Mexico), Class B (Emissions), FCC Part 68 / Industry Canada (Telecommunications)
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## WARRANTY

<b>Product warranty:</b>	2 years
<b>Connected equipment insurance (USA and Canada Only):</b>	\$250,000 (USA & Canada only)
<b>Optional coverage:</b>	3- and 5-year extended warranties, plus next-day and on-site warranty coverage available

## SPECIAL FEATURES

<b>EPO port:</b>	Supports Emergency Power Off function via dedicated built-in EPO jack
<b>Cold Start:</b>	Inverter can be cold started to enable temporary AC output during a power failure
<b>Appearance:</b>	Attractive all-black color scheme

## BATTERY PACK ACCESSORY (optional)

<b>Battery Pack Accessory (optional):</b>	BP48V24-2U, BP48V60RT-3U
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*The policy of Tripp Lite is one of continuous improvement.  
Specifications are subject to change without notice.  
Therefore, your product may vary slightly from what is currently listed.*



**Tripp Lite World Headquarters**  
1111 W. 35th Street  
Chicago, IL 60609 USA

**Customer Support**  
(773) 869-1234

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