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# 120V 1000VA 800W A/V Pure Sine Wave UPS, Extended Run, 2U Rack-Mount, USB, 6 Outlets

# MODEL NUMBER: HTR10-2U





## Description

Tripp Lite's HTR10-2U Pure Sine Wave 1000VA / 800 Watt 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 dial-up, DSL or network Ethernet connection. Requires only 2 rack spaces (2U). 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 remote access, control and diagnostics capability with email notification. 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. \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only).

# Highlights

- 1000VA on-line, double-conversion, extended-run UPS; rackmount hardware included
- 6 outlets; 2 switchable load banks
- IP remote access, control and diagnostics capability with email notification (built-in accessory slot; SNMPWEBCARD available separately)
- Zero transfer time to battery takes incoming AC power and remakes it into perfect output power with a pure sine wave
- Maintains sine wave 100/110 or 120V +/-2% output during overvoltages to 138 and brownouts as low as 65V (50/60Hz auto-sensing)
- Pure Sine Wave operation completely isolates connected components from power problems
- Drivers written for Crestron, AMX and Savant for seamless integration
- \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only)

#### **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

#### Features

- 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 control systems, high-definition sources, Audio/Video editing suites, digital consoles, DVD/music/PCs/servers, RAIDs, media centers, PVRs/DVRs, boardrooms, digital processors/EFX, racks 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 from anywhere in the world
- Single-line tel/DSL/Ethernet surge suppression
- Internal battery set offers 22 min. runtime at half load (400W) and 12 min. a 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
- \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only)

# **Specifications**

OUTPUT	
Output Volt Amp Capacity (VA)	1000
Output Watt Capacity (Watts)	800
Nominal Output Voltage(s) Supported	100V; 110V; 120V
Frequency Compatibility	50 / 60 Hz
Frequency Compatibility Details	Output frequency matches input nominal on startup
Output Voltage Regulation (Line Mode)	+/- 2%
Output Receptacles	(6) 5-15R
Load Management Receptacles	Two controllable single-outlet 5-15R load banks
Output AC Waveform (Battery Mode)	Pure Sine wave
INPUT	
Rated input current (Maximum Load)	8.6A
Nominal Input Voltage(s) Supported	120V AC
UPS Input Connection Type	5-15P
UPS Input Cord Length (ft.)	6
UPS Input Cord Length (m)	1.8



Recommended Electrical Service	15A 120V	
Voltage Compatibility (VAC)	120	
Input Phase	Single-Phase	
BATTERY		
Full Load Runtime (min.)	6 min. (800w)	
Half Load Runtime (min.)	22 min. (400w)	
Expandable Battery Runtime	Supports extended runtime with optional external battery pack BP48V24-2U(limit 1); BP48V60RT3U(multi-pack compatible)	
External Battery Pack Compatibility	BP48V24-2U(limit 1); BP48V60RT-3U(multi-pack compatible)	
DC System Voltage (VDC)	24	
Battery Recharge Rate (Included Batteries)	Less than 6 hours from 10% to 80%	
Internal UPS Replacement Battery Cartridge	RBC94-2U	
Battery Access	Hot-swap battery replacement supported via front access panel	
Typical Battery Lifespan	3-6 years, depending on usage	
Expandable Runtime	Yes	

# VOLTAGE REGULATION

Voltage Regulation Description	On-line, double-conversion power conditioning maintains output within 2% of 110/120 volts at all times
Overvoltage Correction	Maintains output of selected nominal +/-2% during overvoltages to 138V AC
Undervoltage Correction	2% output voltage regulation during undervoltages to 80
Severe Undervoltage Correction	Maintains output within 2% of nominal during undervoltages to 65 (under 70% load only)

## **USER INTERFACE, ALERTS & CONTROLS**

Switches	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
Audible Alarm	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)
LED Indicators	14 LEDs indicate line power, online mode, economy/bypass mode, on-battery, overload, battery low, replace battery and fault status information; 4-LED meter displays load and battery charge levels; LED panel rotates for viewing in rack/tower formats

# SURGE / NOISE SUPPRESSION

UPS AC Suppression Joule Rating	570 joules
EMI / RFI AC Noise Suppression	Yes
AC Suppression Response Time	Instantaneous



Dataline Suppression	Set of 8-wire RJ style interface jacks offer surge suppression for tel/DSL/Ethernet connections. Pins 1,2,3 and 6 offer Ethernet protection starting at 7.5V and the center two wires, pins 4 & 5, offer tel/DSL line suppression starting at 260V
PHYSICAL	
Installation Form Factors Supported with Included Accessories	Tower
Primary Form Factor	Tower; Rackmount
UPS Power Module Dimensions (hwd, in.)	3.5 x 17.5 x 19
UPS Power Module Dimensions (hwd, cm)	8.9 x 44.4 x 48.3
Rack Height (U Spaces)	2
UPS Power Module Weight (lbs.)	44.1
UPS Power Module Weight (kg)	20.00
UPS Shipping Dimensions (hwd / in.)	9.5 x 20 x 24
UPS Shipping Dimensions (hwd / cm)	24.1 x 50.8 x 61
Shipping Weight (lbs.)	54
Shipping Weight (kg)	13.2
Cooling Method	Built-in cooling fan
UPS Housing Material	Steel
Primary UPS Height (mm)	89
Primary UPS Width (mm)	444
Primary UPS Depth (mm)	483
Shipping Height (mm)	241
Shipping Width (mm)	508
Shipping Depth (mm)	610
ENVIRONMENTAL	
Operating Temperature Range	+32 to +104 degrees Fahrenheit / 0 to +40 degrees Celsius
Storage Temperature Range	+5 to +122 degrees Fahrenheit / -15 to +50 degrees Celsius
Relative Humidity	0 to 95%, non-condensing
AC Mode BTU / Hr. (Full Load)	406.4
Battery Mode BTU / Hr. (Full Load)	442.8
COMMUNICATIONS	
Communications Interface	USB (HID enabled); DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface



WatchDog Compatibility	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
EPO Port	Supports Emergency Power Off function via dedicated built-in EPO jack
SNMP Compatibility	Slot for optional SNMPWEBCARD accessory(#SNMPWEBCARD)
LINE / BATTERY TRANSFER	
Transfer Time	No transfer time (0 ms.) in online, double-conversion mode
Low Voltage Transfer to Battery Power (Setpoint)	80V (100% load), 65V ( <70% load)
High Voltage Transfer to Battery Power (Setpoint)	138
SPECIAL FEATURES	
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported
CERTIFICATIONS	
UPS Certifications	Meets FCC Part 68 / Industrie Canada (telecommunications); Tested to CSA (Canada); Tested to NOM (Mexico); Tested to UL1778 (USA)
WARRANTY	
Product Warranty Period (Worldwide)	2-year limited warranty
Optional Coverage	3-5 year warranties, plus next-day and on-site warranty coverage available for select opportunities. Contact Tripp Lite for additional information
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 Ultimate Lifetime Insurance

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