120V 2200VA 1600W A/V Pure Sine Wave UPS, Extended Run, 3U Rack-Mount, DB9 Serial, 9 Outlets

MODEL NUMBER: **HTR22-3U**

Highlights

- 2200VA/1600W on-line, double-conversion, extended-run UPS; rackmount hardware included
- 9 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)

Description

Tripp Lite's HTR22-3U Pure Sine Wave 2200VA/1600W 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. Requires only 3 rack spaces (3U). Large internal batteries provide 18 min. half-load runtime and 6 min. full load runtime; runtime is expandable with optional BP72V15-2U and BP72V28RT-3U external battery packs. 2200VA/1600W power handling capacity is compatible with audio/video components and other sensitive electronic applications. Includes 9 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 real time UPS communications via DB9 serial port or SNMPWEBCARD slot for the ultimate in IP remote access, control and diagnostics capability with email notification. Supports detailed monitoring of equipment load levels, self-test data and utility power conditions via both 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)

Package Includes

- HTR22-3U Audio/Video Pure Sine Wave UPS System
- PowerAlert Software and cabling
- Optional-use NEMA 5-15P Plug
- Mounting hardware for 4-post rack enclosures

Features

- HTR22-3U Pure Sine Wave UPS provides perfectly regulated sine wave output within 2% of 120V under all usage conditions
- 2200VA/1600W power handling capacity compatible with control systems, HD 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 120V (+/-2%) values
- 2 switchable load banks (each with 4 outlets) enable remote outlet management for load shedding or remote reboot of individual devices from anywhere in the world
- Standard internal battery set offers 18 min. runtime at half load (800W) and 6 min. at full load (1600W)
- Optional BP72V15-2U external battery pack increases runtime to 98 min. at half load (800W) and 41 min. at full load (1600W); limit 1
- Optional BP72V28RT-3U external battery pack increases runtime to 160 min. at half load (800W) and 69 min. at full load (1600W); multi-pack compatible
- Fault-tolerant auto-bypass maintains continuous utility output to connected equipment, even in cases where the UPS suffers internal failure and requires maintenance
- Offers complete UPS monitoring through included DB9 interface or SNMP interface (requires optional SNMPWEBCARD), or the monitoring of any number of additional UPS systems over IP with included PowerAlert monitoring software
- 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)

- Instruction manual with warranty information

Specifications

OVERVIEW	
UPC Code	037332134875

INPUT	
Rated input current (Maximum Load)	16A
Nominal Input Voltage(s) Supported	120V AC
UPS Input Connection Type	5-20P
UPS Input Cord Length (ft.)	10
UPS Input Cord Length (m)	3.1
Recommended Electrical Service	120V 20A dedicated circuit
Voltage Compatibility (VAC)	120

OUTPUT	

Output Volt Amp Capacity (VA)	2200
Output Watt Capacity (Watts)	1600
Frequency Compatibility	50 / 60 Hz
Frequency Compatibility Details	Output frequency matches input nominal on startup
Output Voltage Regulation (Line Mode)	+/- 2%
Load Management Receptacles	Two switchable four-outlet load banks (bank 1 - four 5-15R outlets, bank 2 - four 5-15/20R outlets)
Output Circuit Breakers	15A branch rated breakers (x2) protect 4 outlets each, L5-20R outlet is unbreakered
Nominal Output Voltage(s) Supported	120V
Output Receptacles	(4) 5-15R; (4) 5-15/20R; (1) L5-20R
BATTERY	
Full Load Runtime (min.)	7 min. (1600w)
Half Load Runtime (min.)	18 min. (800w)
Expandable Battery Runtime	Supports extended runtime with optional external battery packs BP72V15-2U (limit 1) and BP72V28RT-3U (multi-pack compatible)
External Battery Pack Compatibility	BP72V15-2U (limit 1); BP72V28RT-3U (multi-pack compatible)
DC System Voltage (VDC)	72
Battery Recharge Rate (Included Batteries)	Less than 6 hours from 10% to 80%
Internal UPS Replacement Battery Cartridge	RBC96-3U (quantity 1)
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 100/110/120 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	Power off/on switch and battery charge/load level display select switch

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	1014
EMI / RFI AC Noise Suppression	Yes
AC Suppression Response Time	Instantaneous

PHYSICAL	
Cooling Method	Built-in cooling fan
Installation Form Factors Supported with Optional Accessories	2 post rackmount (2POSTRMKITWM); Tower (2-9USTAND)
Primary UPS Depth (mm)	521
Primary UPS Height (mm)	132
Primary UPS Width (mm)	445
Shipping Dimensions (hwd / cm)	64.52 x 59.44 x 33.27
Shipping Dimensions (hwd / in.)	25.40 x 23.40 x 13.10
Shipping Weight (kg)	42.73
Shipping Weight (lbs.)	94.20
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, cm)	13.21 x 44.45 x 52.07
UPS Power Module Dimensions (hwd, in.)	5.2 x 17.5 x 20.5
UPS Power Module Weight (kg)	33.97
UPS Power Module Weight (lbs.)	74.9

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)	812.9
Battery Mode BTU / Hr. (Full Load)	885.6

COMMUNICATIONS	

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 kiosk applications
EPO Port	Supports Emergency Power Off function via set of dedicated built-in EPO jacks
SNMP Compatibility	Slot for optional SNMPWEBCARD accessory (Tripp Lite Model # SNMPWEBCARD)
Communications Interface	DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface

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

STANDARDS & COMPLIANCE	
Certifications	Tested to UL1778 (USA), cUL (Canada), NOM (Mexico), FCC Class A (emissions)

WARRANTY	
Product Warranty Period (Worldwide)	2-year limited warranty
Optional Coverage	3- and 5-year extended 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