

## SmartPro 120V 700VA 450W Medical-Grade Line-Interactive Tower UPS with 4 Outlets, Full Isolation, USB, DB9

MODEL NUMBER: **SMART700HG**



Provides UL 60601-1 compliant, medical-grade 700VA/450W power backup, ideal for use in patient-care vicinities. The built-in isolation transformer offers full isolation while maintaining AC surge protection in all modes.

### Description

Tripp Lite's SMART700HG medical-grade UPS system provides dependable battery backup and is fully compliant with UL 60601-1 regulations when plugged into a hospital-grade outlet, making it ideal for use in patient-care vicinities. The 700VA/450W capacity provides up to 42 minutes of runtime for a half load, or 18 minutes for a full load so you can work through short power failures and perform an orderly system shutdown in a prolonged blackout.

Built-in line-interactive voltage regulation corrects brownouts as low as 81V and overvoltages as high as 143V to normal 120V nominal output, without drawing battery power. The SMART700HG's built-in isolation transformer with Faraday shield offers full isolation and removes common mode noise while maintaining full AC surge suppression in all modes.

This UPS system features four NEMA 5-15R-HG hospital-grade outlets and has a hospital-grade NEMA 5-15P-HG plug with a 6 ft. cord for flexibility in placement. All four outlets provide both backup protection and surge protection, rated to 480 joules.

The SMART700HG also features diagnostic LEDs, as well as a USB port and a DB9 serial port that work with Tripp Lite's free downloadable PowerAlert software for safe, unattended system shutdown and file saves in the event of a prolonged power failure.

### Application Usage

This UPS contains a lead acid battery designed to be connected continuously to an AC power source, except during brief power outages. It is not intended for frequent charge/discharge cycles, such as mobile cart applications where the UPS is often disconnected from the power source. Using the SMART700HG in this type of application will void the battery warranty. For mobile applications, Tripp Lite recommends the SMART700HGL with lithium iron phosphate (LiFePo4) battery.

### Features

**Provides Ideal UPS Backup in Healthcare Facilities**

### Highlights

- Supports a half load up to 42 minutes; full load up to 18 minutes
- Four hospital-grade outlets and hospital-grade plug
- 480 joule surge suppression rating protects connected equipment
- Alarm mute/alarm quiet control is ideal for use around patients
- Approved for use within the Patient Care Vicinity
- Approved to EN60601-1-2:2015 & IEC60601-1-2:2014, 4th Edition

### Package Includes

- SMART700HG 700VA/450W Medical-Grade Tower UPS System
- USB monitoring cable, 6 ft.
- DB9 serial monitoring cable, 6 ft.
- Owner's Manual



- Compliant with UL 60601-1 standards for use in patient-care vicinities, when plugged into a hospital-grade outlet
- Built-in isolation transformer with Faraday shield offers full isolation and removes common mode noise
- Hospital-grade plug with 6 ft. cord provides flexibility in placement so healthcare workers can focus on treating the patient

#### **Battery Backup and Full Surge Protection**

- 42 minutes runtime for half load (225W); 18 minutes for full load (450W)
- All four hospital-grade outlets provide surge protection rated to 480 joules
- EMI/RFI noise filtering ensures equipment runs smoothly without line noise interference
- Resistant to electrostatic discharge

#### **LEDs and Audible Alarms Keep You Aware of Power Status**

- Indicator lights on the front of the unit show you when the UPS is on and supplying utility power, when operating in voltage correction mode or in battery mode, relative load level and low-battery warning
- Audible alarms alert you to power failure, overload and low battery conditions; the alarm's mute/quiet mode ensures patients are not disturbed

#### **Saves Your Files, Even When You're Away**

- Works with Tripp Lite PowerAlert software (available as a free download) to enable safe, unattended system shutdown and files saves during prolonged power failures
- Connects to your computer via either the DB9 port or USB port

## **Specifications**

<b>OVERVIEW</b>	
UPC Code	037332095107
UPS Type	Line-Interactive
<b>INPUT</b>	
Rated input current (Maximum Load)	5.5A
Nominal Input Voltage(s) Supported	120V AC
UPS Input Connection Type	5-15P-HG
Input Circuit Breakers	10A
UPS Input Cord Length (ft.)	6
UPS Input Cord Length (m)	1.8
Recommended Electrical Service	15A 120V
Input Phase	Single-Phase



Input Cord Length (ft.)	6
Input Cord Length (m)	1.83
<b>OUTPUT</b>	
Output Volt Amp Capacity (VA)	700
Output Watt Capacity (Watts)	450
Power Factor	0.6
Frequency Compatibility	60 Hz
Output Voltage Regulation (Line Mode)	-18%, +8%
Output Voltage Regulation (Battery Mode)	115V (+/- 5%)
Output Receptacle Details	Hospital grade output receptacles
Output AC Waveform (AC Mode)	Sine wave
Output AC Waveform (Battery Mode)	PWM sine wave
Nominal Output Voltage(s) Supported	115V; 120V
Output Receptacles	(4) 5-15R
Individually Controllable Load Banks	No
<b>BATTERY</b>	
Full Load Runtime (min.)	18 min. (450w)
Half Load Runtime (min.)	42 min. (225w)
DC System Voltage (VDC)	36
Battery Recharge Rate (Included Batteries)	Less than 4 hours from 10% to 90%
Internal UPS Replacement Battery Cartridge	RBC36SLT
Battery Access	Battery access door
Battery Replacement Description	Hot-swappable, user replaceable batteries
Expandable Runtime	No
<b>VOLTAGE REGULATION</b>	
Voltage Regulation Description	Automatic voltage regulation (AVR) maintains line power operation with an input voltage range of 81 to 143
Overvoltage Correction	Input voltages between 126 and 143 are reduced by 9%
Undervoltage Correction	Input voltages between 96 and 106 are boosted by 10%
Severe Undervoltage Correction	Input voltages between 81 and 95 are boosted by 21%
<b>USER INTERFACE, ALERTS &amp; CONTROLS</b>	



Switches	2 Switches control off/on power status and alarm-cancel/self-test operation
Alarm Cancel Operation	Power-fail alarm can be silenced using alarm-cancel switch; once silenced, alarm will re-sound to indicate low-battery status
Audible Alarm	Audible alarm indicates power-failure, overload and low-battery conditions
LED Indicators	5 LEDs indicate line power, battery power, overload, voltage regulation and battery low/replace status
<b>SURGE / NOISE SUPPRESSION</b>	
UPS AC Suppression Joule Rating	480
UPS AC Suppression Response Time	Instantaneous
EMI / RFI AC Noise Suppression	Yes
AC Suppression Joule Rating	480
AC Suppression Response Time	Instantaneous
<b>ISOLATION</b>	
Output Isolation Transformer	Hospital grade load isolation transformer
Leakage Current	Equal to 100 microamps
<b>PHYSICAL</b>	
Cooling Method	Fan
Installation Form Factors Supported with Optional Accessories	Wallmount ( <a href="http://www.tripplite.com/Wall-Mount-Bracket-Installation-Accessories-for-UPS-Systems-UPSWM">UPSWM</a> ; - tower mounting kit)
Primary Form Factor	Tower
Primary UPS Depth (mm)	229
Primary UPS Height (mm)	325
Primary UPS Width (mm)	191
Shipping Dimensions (hwd / cm)	43.18 x 28.45 x 33.02
Shipping Dimensions (hwd / in.)	17.00 x 11.20 x 13.00
Shipping Weight (kg)	20.82
Shipping Weight (lbs.)	45.90
UPS Housing Material	PVC
UPS Power Module Dimensions (hwd, cm)	32.51 x 19.05 x 22.86
UPS Power Module Dimensions (hwd, in.)	12.8 x 7.5 x 9
UPS Power Module Weight (kg)	20.05
UPS Power Module Weight (lbs.)	44.2
<b>ENVIRONMENTAL</b>	



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)	97.7
Battery Mode BTU / Hr. (Full Load)	189.1
AC Mode Efficiency Rating (100% Load)	94%
<b>COMMUNICATIONS</b>	
Network Monitoring Port Description	Supports detailed monitoring of UPS and site power conditions
PowerAlert Software	For local monitoring via the UPS's built-in communication ports , download PowerAlert Local software at <a href="http://www.tripplite.com/poweralert">http://www.tripplite.com/poweralert</a>
Communications Cable	USB and DB9 serial cabling included
Communications Interface	USB; DB9 Serial
<b>LINE / BATTERY TRANSFER</b>	
Transfer Time	2-4 milliseconds
Low Voltage Transfer to Battery Power (Setpoint)	81
High Voltage Transfer to Battery Power (Setpoint)	143
<b>SPECIAL FEATURES</b>	
Grounding Lug	Grounding lug
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported
High Availability UPS Features	Hot swappable batteries
Green Energy-Saving Features	Greater than 95% efficiency - GREEN UPS
<b>STANDARDS &amp; COMPLIANCE</b>	
UPS Certifications	Meets FCC Part 15 Category A (EMI); ROHS (Restriction of Hazardous Substances); Tested to CSA (Canada); Tested to UL1778 (USA); Tested to UL60601-1 (medical grade)
<b>WARRANTY</b>	
Product Warranty Period (Worldwide)	2-year limited warranty

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