

Tripp Lite
1111 W. 35th Street

Chicago, IL 60609 USA Telephone: 773.869.1234 www.tripplite.com

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

MODEL NUMBER: SMART700HGL







Provides UL 60601-1 compliant, medical-grade 700VA/450W power backup, ideal for use in patient-care vicinities. Lithium Iron Phosphate batteries provide 20–30 times the cycle life of traditional batteries.

### Description

Tripp Lite's SMART700HGL medical-grade UPS system provides dependable lithium iron phosphate (LiFePO4) battery backup, so you can work through short power failures and perform an orderly system shutdown in a prolonged blackout. It's 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 and 18 minutes for a full load.

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 SMART700HGL'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 a hospital-grade NEMA 5-15P-HG plug with a six-foot cord for flexibility in placement. All four outlets provide both battery backup and 940 joules of surge protection.

The SMART700HGL 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.

#### **Features**

**Provides Ideal UPS Backup in Healthcare Facilities**Compliant with UL 60601-1 standards for use in patient-care vicinities when plugged into a hospital-grade outletBuilt-in isolation transformer with Faraday shield offers full isolation and reduces cumulative leakage current of connected equipment to less than 100 AHospital-grade NEMA 5-15P-HG plug with 6 ft. cord provides flexibility in placement, so healthcare workers can focus on treating the patient

Battery Backup and Full Surge ProtectionSupports half load for 42 min. and full load for 18 min. with standard LiFePO4 internal batteryHospital-grade NEMA 5-15R-HG outlets provide 940 joules of surge protectionEMI/RFI noise filtering ensures equipment runs smoothly without line noise interferenceResistant to electrostatic discharge10,000-cycle LiFePO4 battery

LEDs and Audible Alarms Keep You Aware of Power Status Indicator lights monitor when the UPS is

# **Highlights**

- 42 min. runtime at half load; 18 min. at full load
- Reduces cumulative leakage current to under 100 A
- Floating AC output prevents noise coupling
- 940 joules of surge protection
- 10,000-cycle LiFePO4 battery
- Approved for use within the Patient Care Vicinity
- Approved to EN60601-1-2:2015
   & IEC60601-1-2:2014, 4th
   Edition

## **Package Includes**

- SMART700HGL 700VA/450W
   Medical-Grade Tower UPS
   System
- USB monitoring cable, 6 ft.
- DB9 serial monitoring cable, 6 ft.
- 5 yr. warranty on UPS and batteries
- Owner's manual



on and supplying utility power, when operating in voltage correction mode or in battery mode, relative load level and low-battery warningAudible alarms alert you to power failure, overload and low battery conditionsMute/quiet mode ensures "alarm fatigue" compliance

Saves Your Files, Even When You're AwayWorks with Tripp Lite PowerAlert software (available as a free download) to enable safe, unattended system shutdown and files saves during prolonged power failuresConnects to your computer via DB9 or USB port

# **Specifications**

OVERVIEW		
UPC Code	037332192219	
UPS Type	Line-Interactive	
OUTPUT		
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	
INPUT		
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	
BATTERY		
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%	
Battery Access	Battery access door	
Expandable Runtime	No	
VOLTAGE REGULATION		
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%	
USER INTERFACE, ALERTS & CONTROLS		
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	
SURGE / NOISE SUPPRESSION		
UPS AC Suppression Joule Rating	940	
UPS AC Suppression Response Time	Instantaneous	
EMI / RFI AC Noise Suppression	Yes	
AC Suppression Joule Rating	940	
AC Suppression Response Time	Instantaneous	
ISOLATION		
Output Isolation Transformer	Hospital grade load isolation transformer	
Leakage Current	Equal to less than 100 microamps	
PHYSICAL		
Cooling Method	Fan	



Installation Form Factors Supported with Optional Accessories	Wallmount (UPSWM - 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)	16.07
Shipping Weight (lbs.)	35.43
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)	15.30
UPS Power Module Weight (lbs.)	33.73
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)	97.7
Battery Mode BTU / Hr. (Full Load)	189.1
AC Mode Efficiency Rating (100% Load)	94%
COMMUNICATIONS	
Communications Interface	USB; DB9 Serial
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 http://www.tripplite.com/poweralert
Communications Cable	USB and DB9 serial cabling included
LINE / BATTERY TRANSFER	
Transfer Time	2-4 milliseconds
Low Voltage Transfer to Battery Power (Setpoint)	81
High Voltage Transfer to Battery	



**Tripp Lite**1111 W. 35th Street
Chicago, IL 60609 USA
Telephone: 773.869.1234

SPECIAL FEATURES			
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		
CERTIFICATIONS			
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)		
WARRANTY			
Product Warranty Period (Worldwide)	5-year limited warranty		

© 2019 Tripp Lite. All rights reserved. All product and company names are trademarks or registered trademarks of their respective holders. Use of them does not imply any affiliation with or endorsement by them. Tripp Lite has a policy of continuous improvement. Specifications are subject to change without notice. Tripp Lite uses primary and third-party agencies to test its products for compliance with standards. See a list of Tripp Lite's testing agencies: <a href="https://www.tripplite.com/products/product-certification-agencies">https://www.tripplite.com/products/product-certification-agencies</a>