

# SmartPro UPS System

Intelligent line interactive medical-grade battery backup and network power management



## Model #: SMART700HG

- ▶ UL2601-1 listed. Full isolation
- ▶ 700VA line interactive tower UPS system with less than 300 microamps of leakage
- ▶ Hospital-grade plug and 4 hospital-grade NEMA5-15R output receptacles
- ▶ Corrects brownouts as low as 81V and overvoltages to 143V without using battery power
- ▶ Enhanced communications (1 RS-232 / 1 USB)

## DESCRIPTION

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Tripp Lite's SMART700HG offers medical-grade UPS protection with built-in line interactive voltage regulation, intelligent monitoring and unattended shutdown capability. UL2601-1 listed as medical electrical equipment with less than 300 microamps leakage current for the UPS and all connected equipment. Built-in isolation transformer with faraday shield removes common mode noise while maintaining full AC surge suppression in all modes. Resistant to electrostatic discharge. Includes high quality hospital-grade plug and outlets. 700VA power handling capacity supports computers, internetworking equipment and other critical loads during commercial power failures. Line interactive voltage regulation corrects brownouts as low as 81V and overvoltages as high as 143 back to normal 120V levels, saving battery reserves for use only during complete power failures. Includes 4 outlets, diagnostic LEDs and built-in USB & RS-232 communications ports that work with downloadable PowerAlert Software and cabling to provide automatic unattended shutdown of connected network and PC applications.

## KEY BUYING POINTS

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- Ideal UPS protection for applications in medical patient-care areas where UL2601-1 listed medical electrical equipment is required
- Maintains less than 300 microamps leakage current for UPS and all connected equipment
- Built-in isolation transformer with faraday shield offers full isolation and removes common mode noise while maintaining full AC surge suppression in all modes
- Line-interactive voltage regulation corrects brownouts and overvoltages from 81 to 143 volts back to usable 120V output levels, without using battery power
- Hospital-grade plug and outlets offer added degree of safety and reliability to input/output connections
- Full line isolation offers a higher degree of safety and prevents operational problems in sensitive electronic equipment
- Resistant to electrostatic discharge
- Supports loads up to 700VA / 450 watts
- 42 minutes half load runtime (with 350VA load), 18 minutes full load runtime (with 700VA load)
- 4 protected hospital-grade outlets; 6-ft. cord
- RS-232 and USB monitoring ports for remote monitoring and unattended shutdown
- SNMP compatible with separate purchase SNMPWEBSOLO ethernet adapter accessory
- PowerAlert unattended shutdown software available via free download from [www.tripplite.com](http://www.tripplite.com) (cabling included)
- Complete surge protection, line isolation and EMI/RFI noise filtering
- 2 year product warranty
- 5 diagnostic LEDs indicate AC present, on battery, voltage correction, overload & battery low/replace
- Battery replacement door
- Grounding lug

## TYPICAL APPLICATIONS

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- UL 2601-1 listed UPS provides ultimate safety and reliability for patient point of care solutions, telemedicine, nurse's stations, wireless communications systems, electronic prescribing applications, medical imaging and mission critical equipment. Not recommended for life support applications.

## OPTIONS & ACCESSORIES

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- SNMP accessories: [SNMPWEBSOLO](#), [ENVIROSENSE](#)
- Wallmount Bracket: [UPSWM](#)
- Dataline protectors: [DNET1](#), [DTEL2](#), [DCATV](#)
- Circuit Tester: [CT120](#)
- Extended warranties: 3 Year [WEXT3-500-1500](#), 5 Year [WEXT5-500-1500](#)

## PACKAGE INCLUDES

- SMART700HG Medical Grade UPS System
- One USB and One DB9 monitoring cable
- Warranty information
- Instruction manual

## COMPLETE SPECIFICATIONS

SYSTEM OVERVIEW	
System overview:	Medical Grade tower line interactive UPS system includes built in isolation transformer with faraday shield and line interactive voltage regulation, AC surge suppression, RS-232 and USB monitoring ports with complete cabling, plus hospital-grade plug and outlets. UL2601-1 listed as medical electrical equipment with less than 300 microamps cumulative leakage current for UPS and connected loads.
Voltage compatibility:	120V AC
Frequency compatibility:	60 Hz
OUTPUT	
Output volt amp capacity (VA):	700
Output watt capacity (watts):	450
Output nominal voltage:	120V
Output voltage regulation:	LINE MODE: Sine wave line voltage 120V (-18% / +8%) BATTERY MODE: PWM sine wave output 120V +/-5%
Output frequency regulation:	LINE MODE: Passes line frequency of 60Hz +/-10% BATTERY MODE: Inverter output regulated to 60Hz +/-0.5Hz
Outlet quantity / type:	4 NEMA 5-15R Hospital Grade output receptacles
Overload protection:	Resettable circuit breaker
INPUT	
Maximum input amps:	5.5A / 550 watts
Input connection type:	NEMA 5-15P Hospital Grade
Input cord length:	6 ft., 14 gauge
Recommended electrical service:	15A 120V
BATTERY	
Full load runtime:	18 minutes (700VA)
Half load runtime:	42 minutes (350VA)
DC system voltage:	36V DC
Typical battery lifespan:	3-6 years, depending on usage
Battery recharge rate:	2-4 hours to 90%
VOLTAGE REGULATION	
Voltage regulation description:	Line interactive UPS offers 2 boost levels of brownout correction and a single level of

	overvoltage adjustment to maintain usable, computer grade output without consuming battery power over an input voltage range of 81 to 143V AC.
<b>Overvoltage correction:</b>	Input voltages between 126 and 143V AC are reduced by 9%
<b>Direct pass through:</b>	Input voltages between 105 and 125V AC are passed through unchanged
<b>Brownout correction:</b>	Input voltages between 96 and 106V AC are boosted by 10%
<b>Severe brownout correction:</b>	Input voltages between 81 and 95V AC are boosted by 21%
<b>LEDS ALARMS &amp; SWITCHES</b>	
<b>Front panel LEDs:</b>	Yes, includes 5 front-panel indicator LEDs to show battery charge level, AC line voltage levels, automatic voltage regulation status, UPS load level and replace battery warning
<b>Alarms:</b>	3 function audible alarm indicates power failure conditions (4 short beeps every 10 seconds), overload (continuous short beeps) and low battery (continuous tone)
<b>Switches:</b>	Yes, includes 2 front panel mounted push-button switches for system enable, self-test and alarm cancel functions
<b>SURGE / NOISE SUPPRESSION</b>	
<b>AC surge suppression:</b>	Conforms to IEEE 587 / ANSI C62.41 specifications
<b>AC suppression response time:</b>	Instantaneous
<b>EMI / RFI AC noise suppression:</b>	Yes
<b>PHYSICAL</b>	
<b>Shipping weight (lbs):</b>	48
<b>Shipping weight (kg):</b>	21.8
<b>Unit weight (lbs):</b>	44.6
<b>Unit weight (kg):</b>	20.2
<b>Unit Dimensions (HWD/in):</b>	12.75 x 7.5 x 9
<b>Unit Dimensions (HWD/cm):</b>	32.4 x 19.1 x 22.9
<b>Material of construction:</b>	PVC
<b>Form factors supported:</b>	Tower, wall mountable with optional UPSWM accessory
<b>Cooling method:</b>	Cooling via rear-exit cooling fan
<b>Battery Access:</b>	Battery access door allows hot swap battery replacement without powering connected equipment off
<b>ENVIRONMENTAL</b>	
<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
<b>COMMUNICATIONS</b>	
<b>Network monitoring port:</b>	Includes 2 built-in monitoring ports, 1-USB & 1-RS232
<b>Software and cabling included:</b>	PowerAlert UPS monitoring software is available via free download from <a href="http://www.tripplite.com">www.tripplite.com</a> for all common network and standalone operating systems. Ships with 2 cables, 1-USB to USB & 1-DB9 to DB9
<b>SNMP compatibility:</b>	Separate purchase "SNMPWEBSOLO" external ethernet adapter allows UPS to be used as a managed network device from remote network management stations, enabled network workstations and password protected remote web browsers
<b>LINE / BATTERY TRANSFER</b>	
<b>Transfer time from line power to battery mode:</b>	2-4 milliseconds

<b>Low voltage transfer to battery power:</b>	81V (resets to line power as voltage increases to 85V)
<b>High voltage transfer to battery power:</b>	143V (resets to line power as voltage decreases to 139V)
<b>CERTIFICATIONS</b>	
<b>Certifications:</b>	UL1778 (USA, Series AGSM700PSR3HG), UL2601-1 (Medical), cUL (Canada), FCC Class A (emissions)
<b>WARRANTY</b>	
<b>Optional coverage:</b>	3 year, 5 year, next day and on-site warranty coverage available in many areas - contact Tripp Lite
<b>Product warranty:</b>	2 year product warranty
<b>SPECIAL FEATURES</b>	
<b>Cold Start:</b>	Yes, inverter can be "cold started" to enable temporary AC output during a power failure
<b>Appearance:</b>	Attractive gray tower UPS

*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.*



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