

Medical hardware for highest expectations



Datasheet

In case of questions and for orders
please contact our sales team:

Email: sales@e-medical.com

Phone: +49 (0)5741 - 236 027 0

SmartPro 230V 700VA 450W Medical-Grade Line-Interactive Tower UPS with 6 Outlets, Full Isolation, USB, DB9

MODEL NUMBER: **SMX700HG**



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 SMX700HG 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 36 minutes of runtime for a half load, or 14.5 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 155V and overvoltages as high as 274V to normal 230V nominal output, without drawing battery power. The SMX700HG'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. Cumulative leakage current of all connected equipment is less than 100 microamps.

This UPS system features six IEC320 C13 hospital-grade outlets and has a hospital-grade IEC320 C14 plug on a 15 cm (6 in.) dongle. All six outlets provide both backup protection and surge protection, rated to 340 joules.

The SMX700HG 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 SMX700HG in this type of application will void the battery warranty.

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 outlet
- Built-in isolation transformer with Faraday shield offers full isolation and removes common mode noise

Battery Backup and Full Surge Protection

Highlights

- Supports a half load up to 36 minutes; full load up to 14.5 minutes
- Six IEC320 C13 hospital-grade outlets and IEC320 C14 hospital-grade plug
- Leakage current less than 100 microamps
- Approved for use within the Patient Care Vicinity
- Approved to EN60601-1-2:2015, 4th Edition
- 340 joule surge suppression rating protects connected equipment
- Alarm mute/alarm quiet control is ideal for use around patients

Package Includes

- SMX700HG 700VA/450W Medical-Grade Tower UPS System
- USB monitoring cable, 1.8 m (6 ft.)
- DB9 serial monitoring cable, 1.8 m (6 ft.)
- Owner's Manual



- 36 minutes runtime for half load (225W); 14.5 minutes for full load (450W)
- All six hospital-grade outlets provide surge protection rated to 340 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

OVERVIEW	
UPC Code	037332140418
UPS Type	Line-Interactive
INPUT	
Rated input current (Maximum Load)	3.6A
Nominal Input Voltage(s) Supported	230V AC
UPS Input Connection Type	C14 inlet
UPS Input Cord Length (ft.)	0.50
UPS Input Cord Length (m)	0.2
Recommended Electrical Service	10A 230V
Voltage Compatibility (VAC)	230
Input Phase	Single-Phase
OUTPUT	
Output Volt Amp Capacity (VA)	700
Output Watt Capacity (Watts)	450
Nominal Voltage Details	230v nominal inverter output voltage
Frequency Compatibility	50 / 60 Hz
Frequency Compatibility Details	Automatic frequency selection
Output Voltage Regulation (Line Mode)	-18%, +8%



Output AC Waveform (Battery Mode)	PWM sine wave
Nominal Output Voltage(s) Supported	220V; 230V; 240V
Output Receptacles	(6) C13
Individually Controllable Load Banks	No
BATTERY	
Battery Type	Valve Regulated Lead Acid (VRLA)
Full Load Runtime (min.)	14.5 min. (450w)
Half Load Runtime (min.)	36 min. (225w)
Expandable Runtime	No
DC System Voltage (VDC)	36
Battery Recharge Rate (Included Batteries)	Less than 3.6 hours from 10% to 90% (typical, full load discharge)
Battery Access	Battery access door allows hot swap battery replacement without powering connected equipment off
Internal UPS Replacement Battery Cartridge	RBC36SLT
Typical Battery Lifespan	3-6 years, depending on usage
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 155 to 274V AC
Overvoltage Correction	Input voltages between 206 and 245V AC are reduced by 9%
Undervoltage Correction	Input voltages between 183 and 199 are boosted by 10%
Severe Undervoltage Correction	Input voltages between 155 and 182 are boosted by 21%
USER INTERFACE, ALERTS & CONTROLS	
Switches	Yes, includes 2 front panel mounted push-button switches for system enable, self-test and alarm cancel functions
Audible Alarm	3 function audible alarm indicates power failure conditions (4 short beeps every 10 seconds), overload (continuous short beeps) and low battery (continuous tone). Audible Alarm is factory muted for silent operation; Audible alarm can be restored to indicate power failure, overload conditions and Low Battery events, using our Free PowerAlert UPS management software.
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	340
EMI / RFI AC Noise Suppression	Yes
AC Suppression Response Time	Instantaneous
PHYSICAL	



Primary Form Factor	Tower
Cooling Method	Cooling via rear-exit cooling fan
Installation Form Factors Supported with Included Accessories	Tower
Installation Form Factors Supported with Optional Accessories	Wallmount (UPSWM - tower mounting kit)
Primary UPS Depth (mm)	229
Primary UPS Height (mm)	325
Primary UPS Width (mm)	191
Shipping Dimensions (hwd / cm)	46.99 x 30.99 x 33.99
Shipping Dimensions (hwd / in.)	18.50 x 12.20 x 13.38
Shipping Weight (kg)	20.59
Shipping Weight (lbs.)	45.40
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)	19.10
UPS Power Module Weight (lbs.)	42.1
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)	208.6
Battery Mode BTU / Hr. (Full Load)	189.1
COMMUNICATIONS	
Network Management Card Description	Network management not supported
Communications Interface	USB; DB9 Serial
LINE / BATTERY TRANSFER	
Transfer Time	5 milliseconds
Low Voltage Transfer to Battery Power (Setpoint)	155
High Voltage Transfer to Battery Power (Setpoint)	274



FEATURES & SPECIFICATIONS	
Grounding Lug	Equipotential connection (back panel grounding lug)
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported
High Availability UPS Features	Surge/noise protection
STANDARDS & COMPLIANCE	
UPS Certifications	CE; Tested to UL60601-1 (medical grade)
WARRANTY	
Product Warranty Period (International)	2-year limited warranty
Product Warranty Period (Mexico)	2-year limited warranty
Product Warranty Period (Puerto Rico)	2-year limited warranty

© 2022 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: <https://www.tripplite.com/products/product-certification-agencies>