

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

MODEL NUMBER: AL-86044



### Description

The AL-86044 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 AL-86044'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 AL-86044 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 outlet
- Built-in isolation transformer with Faraday shield offers full isolation and removes common mode noise

#### Battery Backup and Full Surge Protection

- 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

### 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
- 340 joule surge suppression rating protects connected equipment
- Alarm mute/alarm quiet control is ideal for use around patients

### Package Includes

- AL-86044 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

- 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

OUTPUT	
Output Volt Amp Capacity (VA)	700
Output Watt Capacity (Watts)	450
Nominal Output Voltage(s) Supported	220V; 230V; 240V
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 Receptacles	(6) C13
Output AC Waveform (Battery Mode)	PWM sine wave
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
BATTERY	

Full Load Runtime (min.)	14.5 min. (450w)
Half Load Runtime (min.)	36 min. (225w)
DC System Voltage (VDC)	36
Battery Recharge Rate (Included Batteries)	Less than 3.6 hours from 10% to 90% (typical, full load discharge)
Internal UPS Replacement Battery Cartridge	RBC53
Battery Access	Battery access door allows hot swap battery replacement without powering connected equipment off
Typical Battery Lifespan	3-6 years, depending on usage
Expandable Runtime	No
<b>VOLTAGE REGULATION</b>	
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%
<b>USER INTERFACE, ALERTS &amp; CONTROLS</b>	
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
<b>SURGE / NOISE SUPPRESSION</b>	
UPS AC Suppression Joule Rating	340
EMI / RFI AC Noise Suppression	Yes
AC Suppression Response Time	Instantaneous
<b>PHYSICAL</b>	
Installation Form Factors Supported with Optional Accessories	Wallmount(UPSWM - tower mounting kit)
Primary Form Factor	Tower
UPS Power Module Dimensions (hwd, in.)	12.8 x 7.5 x 9
UPS Power Module Dimensions (hwd, cm)	32.5 x 19 x 22.9
UPS Power Module Weight (lbs.)	42.1

UPS Power Module Weight (kg)	19.10
UPS Shipping Dimensions (hwd / in.)	18.5 x 12.2 x 13.4
UPS Shipping Dimensions (hwd / cm)	47 x 31 x 34
Shipping Weight (lbs.)	45.4
Shipping Weight (kg)	20.4
Cooling Method	Cooling via rear-exit cooling fan
UPS Housing Material	PVC
Primary UPS Height (mm)	325
Primary UPS Width (mm)	190
Primary UPS Depth (mm)	229
Shipping Height (mm)	470
Shipping Width (mm)	310
Shipping Depth (mm)	340
<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)	208.6
Battery Mode BTU / Hr. (Full Load)	189.1
<b>COMMUNICATIONS</b>	
Communications Interface	USB; DB9 Serial
<b>LINE / BATTERY TRANSFER</b>	
Transfer Time	5 milliseconds
Low Voltage Transfer to Battery Power (Setpoint)	155
High Voltage Transfer to Battery Power (Setpoint)	274
<b>SPECIAL FEATURES</b>	
Grounding Lug	Equipotential connection (back panel grounding lug)
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported
<b>CERTIFICATIONS</b>	

UPS Certifications	CE; Tested to UL60601-1 (medical grade)
<b>WARRANTY</b>	
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

