

## SmartPro Medical Grade .7kVA 120V Line interactive Tower UPS, full isolation, USB & Serial ports

MODEL NUMBER: AL-59798



### Description

ALCO Sales AL-59798 offers medical-grade UPS protection with built-in line interactive voltage regulation, intelligent monitoring and unattended shutdown capability. UL 60601-1 listed as medical electrical equipment. Built-in isolation transformer with Faraday shield removes common mode noise while maintaining full AC surge suppression in all modes less than 100 microamps. Resistant to electrostatic discharge. Includes high quality hospital-grade plug and outlets. 700VA power handling capacity supports computers, inter-networking 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.

### Features

- Ideal UPS protection for applications in medical patient-care areas where UL 60601-1 listed medical electrical equipment is required
- 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
- PowerAlert unattended shutdown
- Complete surge protection, line isolation and EMI/RFI noise filtering
- 5 diagnostic LEDs indicate AC present, on battery, voltage correction, overload & battery low/replace

### Highlights

- 700VA line interactive tower UPS
- Maintains 120V nominal output over an input range of 82 to 142V
- Professional features include serial port, hospital grade plug & outlets, built-in isolation transformer and UL60601-1 listing
- Input: NEMA 5-15P (120V 15A) / Output: 4 NEMA 5-15R (120V)
- Leakage current less than 100 microamps

### Package Includes

- AL-59798 Medical Grade UPS System
- One USB and One DB9 monitoring cable
- Warranty information
- Instruction manual

- Battery replacement door and back panel grounding lug

## Specifications

OUTPUT	
Output Volt Amp Capacity (VA)	700
Output Watt Capacity (watts)	450
Output power factor	0.6
Nominal Output Voltage(s) Supported	115V; 120V
Frequency compatibility	60 Hz
Output voltage regulation (line mode)	-18%, +8%
Output voltage regulation (Battery mode)	115V (+/- 5%)
Built-in UPS output receptacles	4 5-15R outlet(s)
Output receptacle details	Hospital grade output receptacles
Output AC waveform (AC mode)	Sine wave
Output AC waveform (battery mode)	PWM sine wave
INPUT	
Rated input current (at maximum load)	5.5A
Nominal Input Voltage(s) Supported	120V AC
UPS input connection type	5-15P-HG
Input circuit breaker	10A
UPS Input cord length (ft.)	6
UPS Input cord length (m)	1.8
Recommended Electrical Service	15A 120V
Input cord length (ft.)	6
Input cord length (m)	1.8
Phase	Single-Phase
BATTERY	
Full load runtime (minutes)	18 min. (450w)
Half load runtime (minutes)	42 min. (225w)
DC system voltage (VDC)	36
Battery recharge rate (included batteries)	Less than 4 hours from 10% to 90%

Replacement battery cartridge (internal UPS battery replacement)	
Battery Access	Battery access door
Battery replacement description	Hot-swappable, user replaceable batteries
<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>LEDS ALARMS &amp; SWITCHES</b>	
LED Indicators	5 LEDs indicate line power, battery power, overload, voltage regulation and battery low/replace status
Alarms	Audible alarm indicates power-failure, overload and low-battery conditions
Alarm cancel operation	Power-fail alarm can be silenced using alarm-cancel switch; once silenced, alarm will re-sound to indicate low-battery status
Switches	2 Switches control off/on power status and alarm-cancel/self-test operation
<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>	
Installation form factors supported with included accessories	Tower
Installation form factors supported with optional accessories	Wallmount (UPSWM - tower mounting kit)
Primary form factor	Tower
UPS / Power Module dimensions in primary form factor (height x width x depth / inches)	12.8 x 7.5 x 9

UPS / Power Module dimensions in primary form factor (height x width x depth / cm)	32.4 x 19 x 22.9
UPS / Power Module weight (lbs)	44.2
UPS / Power Module weight (kg)	20.1
UPS Shipping dimensions (height x width x depth / inches)	18.2 x 11.8 x 13.5
UPS Shipping dimensions (height x width x depth / cm)	46.4 x 29.8 x 34.3
Shipping weight (lbs)	49
Shipping weight (kg)	22.2
Cooling method	Fan
UPS housing material	PVC
<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>	
Communications interface	USB; DB9 Serial
Network monitoring port description	Supports detailed monitoring of UPS and site power conditions
PowerAlert software	Included
Communications cable	USB and DB9 serial cabling included
<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 & high efficiency features	Greater than 95% efficiency - GREEN UPS
<b>CERTIFICATIONS</b>	
UPS Certifications	Tested to UL1778 (USA); Tested to CSA (Canada); Meets FCC Part 15 Category A (EMI); Tested to UL60601-1 (medical grade)
<b>WARRANTY</b>	
Product Warranty Period (Worldwide)	2-year limited warranty

More information, including related products, owner's manuals, and additional technical specifications, can be found online at:  
[www.alcosales.com](http://www.alcosales.com)

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