

## 450VA 240W Line-Interactive UPS with 4 Outlets - AVR, VS Series, 120V, 50/60 Hz, Tower

MODEL NUMBER: VS450T



Line-interactive UPS provides basic battery backup with AVR protection for your office computer, home theater setup or digital signage.

### Features

**450VA/240W/120V Battery Backup for PCs, Home Theater or Digital Signage** This 120V UPS with AVR protection provides reliable battery backup and AC power protection against blackouts, brownouts, surges and line noise that can damage valuable electronics or destroy data. The four-outlet 120V battery backup is ideal protection for your home office, media center or commerce components, including computers, routers, printers, HDTVs, Blu-ray players, game consoles, ATMs, security systems and digital signage equipment.

**Allows Time to Back Up Critical Files During a Blackout** Backup support allows you to work through short power failures, and gives you enough time to safely save files and shut down your system in case of a prolonged blackout. Backup time varies according to load, but the line-interactive UPS system should keep an energy-efficient desktop computer with small LCD monitor powered as long as 17 minutes. During normal operation, incoming utility power keeps the replaceable internal battery fully charged, so backup power will always be available.

**Connects Your Equipment to 4 NEMA 5-15R Outlets** Three 5-15R outlets provide both battery backup and surge protection for your computer, monitor and other crucial components. The other 5-15R outlet is surge-protected only for printers, scanners and other non-essential equipment. A high 95% line mode efficiency rating reduces BTU emissions, energy consumption and, ultimately, your energy costs.

**Automatic Voltage Regulation (AVR) Corrects Low-Voltage Conditions** AVR protects your equipment from incremental hardware damage, data loss and performance problems caused by brownouts. The VS450T can correct brownouts as low as 89V and overvoltages as high as 145V back to nominal 120V power without drawing on the battery backup needed to support your equipment during a blackout.

**316 Joules Fight Back Against Unexpected Power Surges** A 316-joule surge suppression rating protects connected components from the harmful effects of power surges.

**Combats Electromagnetic Interference That Can Harm Equipment** Various electromagnetic and radio sources found in virtually every home and business can cause disruptive interference on the AC line. Known as EMI (electromagnetic interference) and RFI (radio frequency interference), this line noise is a common cause of performance problems and can lead to incremental hardware damage, data corruption and audio/video transmission problems. The VS450T incorporates technology that filters out disruptive

### Highlights

- Protects valuable equipment from dangers posed by brownouts, surges and line noise
- AVR battery backup allows time to save files and safely shut down during blackouts
- 4 NEMA 5-15R outlets provide power to PC, home theater or digital signage equipment
- Alarm and front-panel LEDs report online, battery, fault and overload conditions
- High 95% efficiency with low BTU ratings saves power and lowers your energy costs

### Applications

- Protect your PC and other sensitive electronics against power surges, brownouts and blackouts
- Operate essential equipment during short-term power outages using battery backup power
- Shut down PCs, DVRs, routers and other equipment without data loss during long-term power outages

### Package Includes

- VS450T 450VA 240W Line-Interactive UPS with 4 Outlets
- Owner's manual

line noise so that it won't affect your equipment.

**Easy-to-Read LEDs Report Real-Time UPS and Power Status** Three front-panel LED indicators monitor essential information, such as online, battery and fault modes. An audible alarm will sound in case of low battery, excessive load and fault condition.

**Tower Form Factor for Easy Placement in Your Workspace or Media Center** The long-lasting ABS housing fits easily on a desktop, shelf or anywhere else convenient to your workstation or home theater. The five-foot power cord with NEMA 5-15P plug connects to a properly grounded AC wall outlet.

## Specifications

OVERVIEW	
UPC Code	037332212887
UPS Type	Line-Interactive
INPUT	
Rated input current (Maximum Load)	5A
Nominal Input Voltage(s) Supported	120V AC
UPS Input Connection Type	5-15P
Input Circuit Breakers	5A
UPS Input Cord Length (ft.)	5
UPS Input Cord Length (m)	1.5
Recommended Electrical Service	15A 120V
Input Phase	Single-Phase
OUTPUT	
Output Capacity (VA)	450
Output Capacity (kVA)	0.45
Output Capacity (Watts)	240
Output Capacity (kW)	0.24
Output Capacity Details	3.8A @ 120V. (LINE MODE) 110%+/- 10% @ 5 minutes; (BATTERY MODE) 110% +/- 10% @ 5 seconds
Power Factor	0.53
Nominal Voltage Details	120V sinusoidal in line mode and 120V PWM in battery mode
Frequency Compatibility	60 Hz
Frequency Compatibility Details	Output is regulated to +/-0.05Hz when input frequency exceeds +/-5Hz of nominal.
Output Voltage Regulation (Line Mode)	120V (+9%, -12%)
Output Voltage Regulation (Battery Mode)	120V (+/- 10%)

UPS Output Receptacles (Surge Suppression Only)	3 UPS outlets, 1 surge-only outlet
Output AC Waveform (AC Mode)	Sine wave
Output AC Waveform (Battery Mode)	PWM sine wave
Nominal Output Voltage(s) Supported	110V; 115V; 120V
Output Receptacles	(4) 5-15R
Individually Controllable Load Banks	No
<b>BATTERY</b>	
Battery Type	Valve Regulated Lead Acid (VRLA)
Runtime Full Load (min.)	0.5 min. (240W)
Runtime Half Load (min.)	5 min. (120W)
Expandable Runtime	No
DC System Voltage (VDC)	12
Battery Recharge Rate (Included Batteries)	8 hours (10% to 90%)
<b>VOLTAGE REGULATION</b>	
Voltage Regulation Description	Automatic voltage regulation (AVR) maintains line power operation with an input voltage range of 89 to 145
Overvoltage Correction	Input voltages between 132 and 145 are reduced by 15%
Undervoltage Correction	Input voltages between 89 and 108 are boosted by 18%
<b>USER INTERFACE, ALERTS &amp; CONTROLS</b>	
Switches	Controls off/on power status
Audible Alarm	Audible alarm indicates low-battery, fault, overload and replace-battery status
LED Indicators	3 LEDs indicate online mode (green), battery mode (yellow) and fault mode (red)
<b>SURGE / NOISE SUPPRESSION</b>	
UPS AC Suppression Joule Rating	316
UPS AC Suppression Response Time	Instantaneous
EMI / RFI AC Noise Suppression	Yes
<b>PHYSICAL</b>	
Primary Form Factor	Tower
Installation Form Factors Supported with Included Accessories	Tower
Primary UPS Depth (mm)	300

Primary UPS Height (mm)	142
Primary UPS Width (mm)	102
Shipping Dimensions (hwd / in.)	8.70 x 5.50 x 13.50
Shipping Weight (kg)	3.99
UPS Housing Material	ABS
UPS Power Module Dimensions (hwd, in.)	5.6 x 4 x 11.8
UPS Power Module Weight (kg)	3.72
UPS Power Module Weight (lbs.)	8.2
Unit Weight (lbs.)	8.200
Unit Weight (kg)	3.72
<b>ENVIRONMENTAL</b>	
Operating Temperature Range	32° to 104°F (0° to 40°C)
Storage Temperature Range	5° to 113°F (-15° to 45°C )
Relative Humidity	0 to 90%, non-condensing
AC Mode BTU / Hr. (Full Load)	23
AC Mode Efficiency Rating (100% Load)	95%
AC Economy Mode Efficiency Rating (100% Load)	0.95
Operating Elevation (ft.)	6561 ft. (2000 m) above sea level
<b>COMMUNICATIONS</b>	
Network Management Card Description	Network management not supported
Communications Interface	None
<b>LINE / BATTERY TRANSFER</b>	
Transfer Time	6 milliseconds
Low Voltage Transfer to Battery Power (Setpoint)	89
High Voltage Transfer to Battery Power (Setpoint)	145
<b>FEATURES &amp; SPECIFICATIONS</b>	
High Availability UPS Features	Automatic Voltage Regulation (AVR); Surge/noise protection
<b>STANDARDS &amp; COMPLIANCE</b>	
Product Certifications	CSA (Canada); NOM (Mexico); UL 1778

Product Compliance	RoHS; FCC Part 15 Class A (USA)
<b>WARRANTY &amp; SUPPORT</b>	
Product Warranty Period (U.S. & Canada)	3-year limited warranty
Product Warranty Period (Latin America)	3-year limited warranty
Product Warranty Period (International)	2-year limited warranty
Product Warranty Period (Mexico)	3-year limited warranty