LIEBERT® PSI-XR

High Performance Rack-Mount UPS for Network Power Protection



OVERVIEW

Liebert PSI-XR allows you to get more from your UPS and your protected equipment, with features normally found only on more expensive systems:

- Greater than five minutes of internal battery backup time at full load provides ample time for an orderly shutdown of connected equipment.
- Optional matching external battery cabinets offer more backup time - add up to 6 additional cabinets to extend battery runtime to meet equipment needs.
- Liebert PSI-XR operates
 at a higher output power
 factor meaning less power
 consumption. This results in
 your network running at lower
 power levels and lower heat
 levels, and ultimately provides a
 longer network service life.
- Remote communications and shutdown options provide remote monitoring and power management - serial and contact closure, USB, SNMP

Liebert® PSI-XR is a compact, line-interactive UPS system designed especially for IT applications such as network closets and small data centers. It provides reliable power protection for servers, critical nodes, network workstations, large network peripherals, network routers, bridges, hubs and other electronic equipment. Matching battery cabinets are available to extend the on-battery operating time.



Ideally suited for:

- PCs
- Network workstations
- Servers
- Network closets
- Large network peripherals
- VolP



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Reliable UPS Protection And Extended Battery Time To Keep Your Network Up And Running

The flexible design of Liebert® PSI-XR allows the unit to be configured as a self-standing tower or to be rack-mounted within a 2U space. It is available in four capacities, and both 120V or 230V models.

The UPS features an innovative line-interactive design incorporating buck/boost automatic voltage regulation technology. This protects against utility voltage fluctuation by raising and lowering utility power to the level needed by the connected equipment. It also allows the UPS to prolong battery life by maximizing its time on utility power before going to battery.

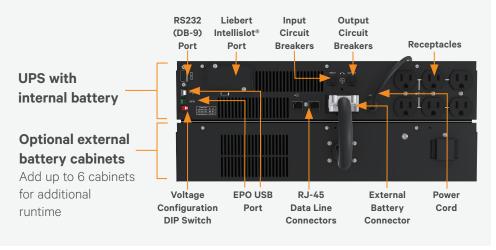
Battery Runtime Chart

(Runtimes are in minutes, assuming fully charged batteries at 25°C)

NUMBER OF BATTERIES	LOAD %	1000VA	1500VA	2200VA	3000VA
Internal Battery	50	15	13	14	13
	100	6	5	5	5
Internal Battery +1	50	73	55	45	31
External Battery Cabinet	100	31	18	15	12
Internal Battery +2	50	129	95	67	56
External Battery Cabinet	100	65	46	29	18
Internal Battery +3	50	181	131	95	73
External Battery Cabinet	100	96	64	48	31
Internal Battery +4	50	233	167	143	95
External Battery Cabinet	100	124	82	72	47
Internal Battery +5	50	285	203	167	113
External Battery Cabinet	100	151	106	84	56
Internal Battery +6	50	336	239	191	131
External Battery Cabinet	100	179	124	102	65

Optional external battery cabinets

Provide extended runtime for applications that require longer backup time.



Liebert PSI-XR Standard Features

Flexibility

Six to seven battery-backed outlets

Allows the Liebert PSI-XR to be more flexible in accommodating additional equipment to be connected to the UPS via the 15, 20 or 30 Amp receptacles.

Configurable input voltage window

Allows the UPS to be properly matched to the incoming utility power and adjusts its input window and transfer points to supply precisely regulated power to connected loads within the selected range. Also enables the UPS to meet the required input voltage when transferring to battery.

Rotatable Display Panel

90 degrees rotatable LED display panel rotates 90° to make the readout of the LED display easy to see in rack or tower position.



Automatic Frequency Sensing

The UPS automatically adjusts to the input frequency, 50Hz or 60Hz.

Rack Rail Kit

These telescoping rails mount to the sides of the UPS to facilitate installation into a rackmount enclosure.

Higher Availability:

Data line surge protection

Network surge protection for equipment connected to the UPS via the RJ-45.

Advance early warning of UPS system status

The Liebert PSI-XR offers multiple audible and visual alarms to immediately alert you to an input voltage fluctuation (buck/boost), output overload, low battery or replace battery condition.



Greater than five minutes of battery backup time at full load when utility

fails Provides ample time for an orderly shutdown of connected equipment. Optional matching external battery cabinets offer more backup time.

Full sequenced battery testing

The Liebert PSI-XR provides a manual self-diagnostic test feature. This provides a comprehensive analysis of the condition of the batteries within the UPS and will notify you when the internal batteries need to be replaced. The battery test feature can also be programmed for automatic operation using Liebert shutdown software.

Lightning and surge protection

The transient voltage surge suppression (TVSS) circuitry inside the Liebert PSI-XR provides protection for the connected equipment from incoming spikes, surges, and other power anomalies present on the incoming utility power source.

Remote emergency power off

Allows the UPS to be remotely shut down during an emergency.

User replaceable hot swappable batteries

Increase product life and provide prolonged UPS reliability. Batteries are conveniently located behind the front bezel of the unit.

Lowest Total Cost Of Ownership:

0.9 Output Power Factor

Liebert PSI operates at a higher output power factor - meaning less power consumption. This results in your network running at lower power levels and lower heat levels, and ultimately provides a longer network service life.

Wider input voltage window

Prolongs battery life by allowing the UPS to maximize the use of utility power before transferring to battery when input voltage exceeds specified limits.

Reduced installation time and costs

UPS is shipped with batteries connected and charged.

Warranty Protection

Standard two-year warranty ensures UPS replacement if problems occur during the warranty period. Optional one-year and three-year extensions also available.

Multiple Choices For Communication, Shutdown And Reporting:

Serial and Contact Closure Communication Option

Automated shutdown software allows you to monitor communication between the UPS and a server. It also ensures a graceful unattended shutdown in the event of an extended power failure.

USB Communications

Windows (98 and later) built-in power management functions provide monitoring of UPS status and manage the automatic orderly shutdown of the computer if a power outage ever exceeds the battery capacity of the UPS. Liebert USB shutdown and monitoring software is provided.

SNMP Communication Option

Liebert IntelliSlot® Web Card provides SNMP and web-based management to your Liebert PSI-XR. Provides SNMP MIB to monitor and control your UPS from your network management station or any PC running Microsoft Internet Explorer.

- Network shutdown
- Sends both SNMP traps and emails for event notification, and automatically emails a daily UPS history.
- Auto-senses 10M/100M Ethernet
- Compatible with shutdown software to ensure graceful computer shutdown



Liebert PSI-XRW Network Solution Package With Built-In Communications

Liebert PSI-XRW is the standard Liebert PSI-XR made network-ready with a factory-installed Liebert IntelliSlot Web Card for SNMP communications. This totally integrated, cost-efficient solution allows remote monitoring, start-up or restart for connected equipment.

Optional Liebert MicroPOD Output Distribution And Maintenance Bypass Module



When your computer system can't be without power, even for scheduled UPS maintenance, the Liebert MicroPOD Maintenance Bypass and Output Distribution Unit ensures continuous uptime. It allows you to manually transfer connected equipment to utility power via a maintenance bypass switch, permitting scheduled service or UPS replacement without the need to shut down connected equipment. Features include:

- 2U height minimizes rack space requirements
- Installs with plug-and-play ease
- Two-year, no-hassle replacement warranty



Liebert® PSI-XR Specifications

Model Number					
Power Rating, VA/W 1000VW/900W 1500VW/1350W 1920VW/1920W 3000VW/2700W DIMENSIONS, WX D X H IN (MM) VAIVE MINIONS, WX D X H IN (MM) 17.3 x 193 x 25 wide A 25 wide A 90.5 x 88) 17.3 x 193 x 25 wide A 25 wide A 90.5 x 88) 17.3 x 276 x 25 wide A 25 wide A 90.5 x 88) 17.3 x 276 x 25 wide A 25 wide A 90.5 x 88) 17.3 x 276 x 25 wide A 25 wide A 90.5 x 88) 17.3 x 276 x 25 wide A 25 wide A 90.5 x 88) 17.3 x 276 x 25 wide A 90.5 x 88) 17.3 x 276 x 25 wide A 90.5 x 88) 17.3 x 276 x 25 wide A 90.5 x 88) 17.3 x 276 x 25 wide A 90.5 x 88) 17.3 x 276 x 25 wide A 90.5 x 88) 17.3 x 276 x 25 wide A 90.5 x 88) 17.3 x 276 x 25 wide A 90.5 x 88) 17.3 x 276 x 25 wide A 90.5 x 88) 17.3 x 276 x 25 wide A 90.5 x 88) 17.3 x 276 x 25 wide A 90.5 x 88 17.3 x 276 x 25 wide A 90.5 x 88 17.3 x 276 x 25 wide A 90.5 x 88 17.3 x 276 x 25 wide A 90.5 x 88 17.3 x 276 x 25 wide A 90.5 x 88 22 x 34.8 x 9 wide A 90.5 x 88 18.0 x 20 x	Model Number	PS1000RT3-120XR	PS1500RT3-120XR	PS2200RT3-120XR	PS3000RT3-120XR
DIMENSIONS, W X D × H IN (VM) Unit 17.3 x 19.3 x 3.5 x 490.5 x 881 17.3 x 19.3 x 3.5 x 440 x 490.5 x 881 17.3 x 27.6 x 3.5 x 46.4 0 x 700.5 x 881 17.3 x 27.6 x 3.5 x 46.4 0 x 490.5 x 881 17.3 x 27.6 x 3.5 x 46.4 0 x 490.5 x 881 17.3 x 27.6 x 3.5 x 46.4 0 x 200.5 x 881 22 x 24.1 x 9 x 24 x 24 x 22 x 24.1 x 9 x 24 x 24 x 24 x 22 x 24.1 x 9 x 24		PS1000RT3-120XRW	PS1500RT3-120XRW	PS2200RT3-120XRW	PS3000RT3-120XRW
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May	DIMENSIONS, W X D	X H IN (MM)			
### WEIGHT, LB (KC) Unit	Unit				
Unit 56 (25) 62 (28) 92 (42) 105 (48) Shipping 64 (29) 70 (32) 101 (46) 115 (52) INPUT AC PARAMETERS Surge Protection Voltage Range Without Battery Operation Operation NEMA 5-15P pilug NEMA 5-65Hzt, (0.5Hz) Imput Power Cord, 10ft (3m) attached NEMA 5-15P pilug NEMA 5-15P pilug NEMA 5-15P pilug NEMA 5-15P pilug (1) REMA 5-15R (2) NEMA 5-15R (2) NEMA 5-15R (2) NEMA 5-20R T-Slot, accepts 15A pilug (1) REMA 5-20R	Shipping				22 / 0 110 / 0
Name	WEIGHT, LB (KG)				
NPIUT AC PARAMETERS	Unit	56 (25)	62 (28)	92 (42)	105 (48)
Voltage Range Without Battery Operation 83 to 159 VAC (configurable) Frequency Range Input Power Cord, 10ft (3m) attached 20th	Shipping	64 (29)	70 (32)	101 (46)	115 (52)
Voltage Range Without Battery Operation Sine Si	INPUT AC PARAMET	ERS			
Without Battery Operation Frequency Range Input Power Cord, 10ft (3m) attached NEMA 5-15P plug NEMA 5-15P plug NEMA 5-20P plug NEMA L5-30P plug (10ft (3m) attached) NEMA 5-15P plug (10ft (3m) attached) NEMA 5-20P rt-slot, accepts 15A plug (10ft (3m) accepts	Surge Protection		57	,01	
Input Power Cord, 10ft (3m) attached NEMA 5-15P plug NEMA 5-15P plug NEMA 5-20P plug NEMA L5-30P plug	Without Battery		83 to 159 VAC	(configurable)	
10ft (3m) attached Output Receptacles (6) NEMA 5-15R (6) NEMA 5-15R (2) NEMA 5-20R T-Slot, accepts 15A plug (7) NEMA 5-20R T-Slot, accepts 15A plug (7) NEMA 5-20R T-Slot, accepts 15A plug (7) NEMA 15-30R Voltage (Normal Mode) Voltage (Battery Mode) 110/120/127 VAC; 5% before low-battery warning Mode) Transfer Time 4-6 ms typical Battery Waveform Sinewave BATTERY PARAMETERS Type Valve-regulated, non-spillable, lead acid Recharge Time 5 hours to 90% of rated capacity, after full discharge into resistive load BATTERY BACKUP TIME Full Load 5 minutes Half Load 5 minutes Half Load 5 minutes 13-14 minutes typical ENVIRONMENTAL Operating Temperature, °F (°C) Storage Temperature, °F (°C) Relative Humidity 0% to 90%, non-condensing Operating Altitude Up to 3000m (10,000ft) at 35°C (95°F) without derating	Frequency Range		45~65Hz	z, (0.5Hz)	
NEMA 5-20R T-Slot, accepts 15A plug (1) NEMA L5-30R Voltage (Normal Mode) Node) 110/120/127 VAC (configurable) Voltage (Battery 110/120/127 VAC; 5% before low-battery warning Mode) Transfer Time 4-6 ms typical Battery Waveform Sinewave BATTERY PARAMETERS Type Valive-regulated, non-spillable, lead acid Recharge Time 5 hours to 90% of rated capacity, after full discharge into resistive load BATTERY BACKUP TIME Full Load 5 minutes Half Load 5 minutes Half Load 5 minutes Full Load 5 to 104 (0 to 40) ENVIRONMENTAL Operating Temperature, °F (°C) Storage Temperature, °F (°C) Relative Humidity 0% to 90%, non-condensing Operating Altitude Up to 3000m (10,000ft) at 35°C (95°F) without derating	•	NEMA 5-15P plug	NEMA 5-15P plug	NEMA 5-20P plug	NEMA L5-30P plug
Voltage (Battery Mode) Transfer Time 4-6 ms typical Battery Waveform Sinewave BATTERY PARAMETERS Type Valve-regulated, non-spillable, lead acid Recharge Time 5 hours to 90% of rated capacity, after full discharge into resistive load BATTERY BACKUP TIME Full Load 5 minutes Half Load 5 minutes ENVIRONMENTAL Operating Temperature, °F (°C) Relative Humidity 0% to 90%, non-condensing Operating Altitude Up to 3000m (10,000ft) at 35°C (95°F) without derating	Output Receptacles	(6) NEMA 5-15R	(6) NEMA 5-15R	NEMA 5-20R T-Slot,	NEMA 5-20R T-Slot, accepts 15A plug (1)
Mode) Transfer Time 4-6 ms typical Battery Waveform Sinewave BATTERY PARAMETERS Type Valve-regulated, non-spillable, lead acid Recharge Time 5 hours to 90% of rated capacity, after full discharge into resistive load BATTERY BACKUP TIME Full Load 5 minutes Half Load > 10 minutes. 13-14 minutes typical ENVIRONMENTAL Operating Temperature, °F (°C) Storage Temperature, °F (°C) Relative Humidity 0% to 90%, non-condensing Operating Altitude Up to 3000m (10,000ft) at 35°C (95°F) without derating	-		110/120/127 VA	C (configurable)	
Battery Waveform BATTERY PARAMETERS Type Valve-regulated, non-spillable, lead acid Recharge Time 5 hours to 90% of rated capacity, after full discharge into resistive load BATTERY BACKUP TIME Full Load 5 minutes Half Load > 10 minutes. 13-14 minutes typical ENVIRONMENTAL Operating Temperature, °F (°C) Storage Temperature, °F (°C) Relative Humidity 0% to 90%, non-condensing Operating Altitude Up to 3000m (10,000ft) at 35°C (95°F) without derating			110/120/127 VAC; 5% be	fore low-battery warning	1
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Recharge Time 5 hours to 90% of rated capacity, after full discharge into resistive load BATTERY BACKUP TIME Full Load 5 minutes Half Load > 10 minutes. 13-14 minutes typical ENVIRONMENTAL Operating Temperature, °F (°C) Storage Temperature, °F (°C) Relative Humidity 0% to 90%, non-condensing Operating Altitude Up to 3000m (10,000ft) at 35°C (95°F) without derating	BATTERY PARAMET	ERS			
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Temperature, °F (°C) Storage 5 to 104 (-15 to 40) Temperature, °F (°C) Relative Humidity 0% to 90%, non-condensing Operating Altitude Up to 3000m (10,000ft) at 35°C (95°F) without derating	ENVIRONMENTAL				
Temperature, °F (°C) Relative Humidity 0% to 90%, non-condensing Operating Altitude Up to 3000m (10,000ft) at 35°C (95°F) without derating	Temperature, °F		32 to 104	(0 to 40)	
Operating Altitude Up to 3000m (10,000ft) at 35°C (95°F) without derating	Temperature, °F	5 to 104 (-15 to 40)			
	Relative Humidity	0% to 90%, non-condensing			
Audible Noise <40 dBA, internal fan(s) Off, <45 dBA, internal fan(s) On	Operating Altitude	Up to 3000m (10,000ft) at 35°C (95°F) without derating			
	Audible Noise	<40 dBA, internal fan(s) Off, <45 dBA, internal fan(s) On			

AGENCY	
Safety	UL 1778, c-UL Listed
Emissions	FCC Part 15, Class A
Network Surge	UL 497 B
Transportation	ISTA Procedure 1A Certification
RAIL KIT (INCLUD	ED)
Rail Kit	RAILKITPS3G-AEC

NEC limits the input current rating of the 2200VA model to 80% of the input plug's rating. If 1920 or more is required, contact a certified electrician to change the input plug to 30A plug. Vertiv™ assumes no liability for damage caused by miswiring or misapplication of the input plug.

Battery cabinet specifications

Model Number	PSRT3-24VBXR	PSRT3- 48VBXR		
Used w/UPS Model	PS1000RT3- 120XR, PS1500RT3- 120XR	PS2200RT3- 120XR, PS3000RT3- 120XR		
DIMENSIONS, W	X D X H, IN (MM)			
Unit	17.3 x 19.3 x 3.5 (440 x 490.5 x 88)			
Shipping	22 x 26.6 x 9 (5	22 x 26.6 x 9 (560 x 675 x 228)		
WEIGHT, LB (KG)			
Unit	64 (29)			
Shipping	73 (33)			
BATTERIES				
Туре	Valve-regulated, nonspillable, lead acid			
Manufacturer	CSB, YUASA or Equivalent			
ENVIRONMENTA	AL.			
Operating Temperature, °F (°C)	32 to 104	(0 to 40)		
Storage Temperature, °F (°C)	5 to 104 (-15 to 40)			
Relative Humidity	0% to 90%, non-condensing			
Maximum Operating Altitude	10,000 ft. (3000m) at 95°F (35°C without derating			
AGENCY				
Safety	UL 1778, c-UL Listed			
Emissions	FCC Part 15, Class A			
	IOTA D. I. d			

ISTA Procedure 1A Certification

Transportation

 $\textbf{VertivCo.com} \hspace{0.2cm} \textbf{I} \hspace{0.2cm} \textbf{Vertiv Headquarters,} \hspace{0.1cm} \textbf{1050 Dearborn Drive, Columbus,} \hspace{0.1cm} \textbf{OH,} \hspace{0.1cm} \textbf{43085,} \hspace{0.1cm} \textbf{USA} \\$

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SL-23317 (R07/08)