

Liebert® PSI-XR

High Performance Rack-Mount UPS For Network Power Protection



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.

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

Ideally suited for:

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

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.

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.

Battery Runtime Chart

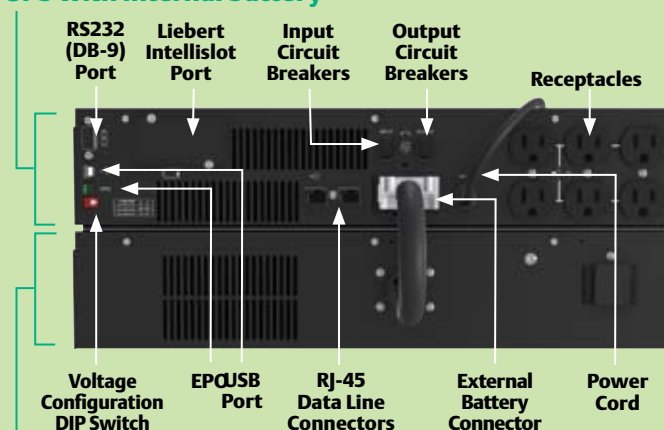
(Runtimes are in minutes, assuming fully charged batteries at 25°C)

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

Optional external battery cabinets

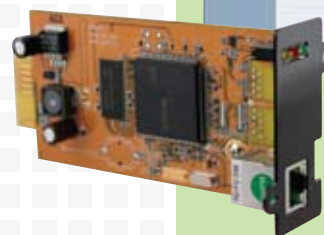
Provide extended runtime for applications that require longer backup time.

UPS with internal battery



Optional External Battery Cabinet

Add up to 6 cabinets for additional runtime



Optional Liebert IntelliSlot Web Card provides SNMP and web-based management



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	PS1000RT3-120XR	PS1500RT3-120XR	PS2200RT3-120XR	PS3000RT3-120XR
Network Solutions Package Number	PS1000RT3-120XRW	PS1500RT3-120XRW	PS2200RT3-120XRW	PS3000RT3-120XRW
Power Rating, VA/W	1000VA/900W	1500VA/1350W	1920VA/1920W	3000VA/2700W
Dimensions, W x D x H, in (mm)				
Unit	17.3 x 19.3 x 3.5 (440 x 490.5 x 88)	17.3 x 19.3 x 3.5 (440 x 490.5 x 88)	17.3 x 27.6 x 3.5 (440 x 700.5 x 88)	17.3 x 27.6 x 3.5 (440 x 700.5 x 88)
Shipping	22 x 24.1 x 9 (560 x 612 x 228)	22 x 24.1 x 9 (560 x 612 x 228)	22 x 34.8 x 9.0 (560 x 884 x 228)	22 x 34.8 x 9.0 (560 x 884 x 228)
Weight, lb (kg)				
Unit	56 (25)	62 (28)	92 (42)	105 (48)
Shipping	64 (29)	70 (32)	101 (46)	115 (52)

Input AC Parameters

Surge Protection	570J			
Voltage Range Without Battery Operation	83 to 159 VAC (configurable)			
Frequency Range	45~65Hz, (0.5Hz)			
Input Power Cord, 10ft (3m) attached	NEMA 5-15P plug	NEMA 5-15P plug	NEMA 5-20P plug	NEMA L5-30P plug
Output Receptacles	(6) NEMA 5-15R	(6) NEMA 5-15R	(4) NEMA 5-15R (2) NEMA 5-20R T-Slot, accepts 15A Plug	(4) NEMA 5-15R (2) NEMA 5-20R T-Slot, accepts 15A Plug (1) NEMA L5-30R
Voltage (Normal Mode)	110/120/127 VAC (configurable)			
Voltage (Battery Mode)	110/120/127 VAC; 5% before low-battery warning			
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)	32 to 104 (0 to 40)
Storage Temperature, °F (°C)	5 to 104 (-15 to 40)
Relative Humidity	0% to 90%, non-condensing
Operating Altitude	Up to 3000m (10,000 ft) 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 (included)

Rail Kit	RAILKITPS3G-AEC
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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. Emerson Network Power 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 (560 x 675 x 228)

Weight, lb (kg)

Unit	64 (29)
Shipping	73 (33)

Batteries

Type	Valve-regulated, nonspillable, lead acid
Manufacturer	CSB, YUASA or Equivalent

Environmental

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
Transportation	ISTA Procedure 1A Certification

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