Liebert® PSI

High Performance Rack-Mount UPS For Network Power Protection





Liebert PSI 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, and other electronic equipment.

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

- Up to five minutes of internal battery backup time at full load provides ample time for an orderly shutdown of connected equipment.
- 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.
- Remote communications and shutdown options provide remote monitoring and power management — contact closure, USB, SNMP
- Liebert PSI is compliant with the Restriction of Hazardous
   Substances Directive (RoHS), prohibiting use of six hazardous
   materials manufacturing of electronics, including lead-free solder.



#### **Ideally suited for:**

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





## PDS Design Solutions Ltd

## Reliable UPS ProtectionTo Keep Your Network Up And Running

# The flexible design of Liebert PSI allows the UPS 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.

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#### **Liebert PSI Standard Features:**

#### Flexibility:

#### **Eight battery-backed outlets**

Allows the Liebert PSI to be more flexible in accommodating additional equipment to be connected to the UPS via the 15 or 20 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**

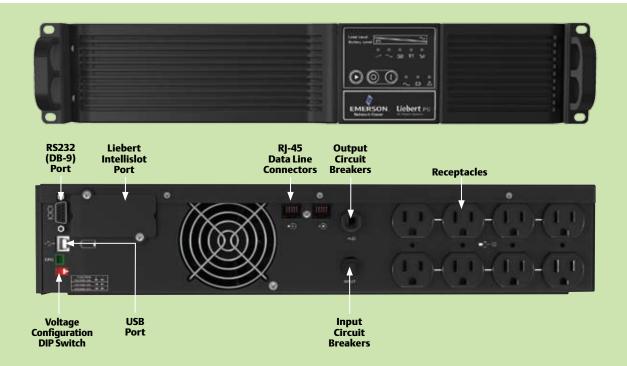
90° rotatable LED display panel rotates 90° to make the readout of the LED display easy to see in rack or tower position.

#### **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 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.

#### Up to five minutes of battery backup time at full load when utility fails

Provides ample time for an orderly shutdown of connected equipment.

#### Full sequenced battery testing

The Liebert PSI 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 IS-WEBRT3 card.

#### **Surge protection**

The transient voltage surge suppression (TVSS) circuitry inside the Liebert PSI 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.

#### 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:

#### **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 MultiLink Shutdown Software is provided.

#### SNMP Communication Option

Liebert IntelliSlot® IS-WEBRT3 Web Card provides SNMP and web-based management to your Liebert PSI. 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-W Network Solution Package With Built-In Communications

Liebert PSI-W is the standard Liebert PSI made network—ready with a factory-installed Liebert IntelliSlot IS-WEBRT3 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



### PDS Design Solutions Ltd

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Liebert PSI XR Specifications	DC1000DT2 120	DC1E00DT2 120	DC2200DT2 120	DC2000DT2 120
Model Number	PS1000RT3-120	PS1500RT3-120	PS2200RT3-120	PS3000RT3-120
Network Solutions Package Number	PS1000RT3-120W	PS1500RT3-120W	PS2200RT3-120W	PS3000RT3-120W
Power Rating, VA/W	1000VA/900W	1500VA/1350W	1920VA/1920W	3000VA/2700W
Dimensions, W x D x H, in (mm)				
Unit	17.3 x 16.2 x 3.5	17.3 x 16.2x 3.5	17.3 x 25.9 x 3.5	17.3 x 25.9 x 3.5
	(440 x 412 x 88)	(440 x 412 x 88)	(440 x 657x 88)	(440 x 657x 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	43 (20)	47 (21)	76 (35)	84 (38)
Shipping	51 (23)	54 (25)	84 (38)	93 (42)
Input AC Parameters				
Surge Protection	570]			
Voltage Range Without Battery	83 to 159 VAC (configurable)			
Operation				
Frequency Range	45~65Hz, (0.5Hz)			
Input Power Cord, 10ft (3m)	NEMA 5-15P plug	NEMA 5-15P plug	NEMA 5-20P plug	NEMA L5-30P plug
attached	. ,	, ,		, ,
Output Receptacles	(8) NEMA 5-15R	(8) NEMA 5-15R	(6) NEMA 5-15R (2) NEMA 5-20R	(6) NEMA 5-15R (2) NEMA 5-20R
			T-Slot, accepts 15A Plug	T-Slot, accepts 15A Plug
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	4 min	3 min	3 min	3 min
Half Load	12 min	9 min	11 min	9 min
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 10,000 ft (3000m) at 95 °F (35 °C) without derating			
Audible Noise	<40 dBA, internal fan(s) Off; <45 dBA, internal fan(s) On			
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Agency Safety	UL 1778, c-UL Listed			
Emissions	FCC Part 15, Class A			
	III. 497 B			
Network Surge	V- 121.2			
Transportation	ISTA Procedure 1A Certification			
Rail Kit (included)			2525 155	
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. Emerson Network Power assumes no liability for damage caused by miswiring or misapplication of the input plug.

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SL-23318 (R09/09) Printed in USA

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The global leader in enabling Business-Critical Continuity $^{\text{TM}}$ .

- AC Power
- Connectivity

  DC Power
- Embedded Computing
- Embedded Power
- Monitoring
  Outside Plant
- Power Switching & Controls
- Precision Cooling
- Racks & Integrated Cabinets
- Services
- Surge Protection

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