## Liebert PowerSure® PSI High Level UPS Performance And Reliability For Server And Network Power Protection









### Proven UPS Protection That Will Keep Your Network Up And Running

The Liebert PowerSure PSI is a compact, line-interactive UPS system designed especially for IT applications. It provides reliable power protection for servers, critical nodes, network workstations, large network peripherals, network routers, bridges, hubs and other electronic equipment.

The flexible design of the Liebert PowerSure PSI allows the unit to be configured as a self-standing mini tower or to be rack-mounted within a 2U space. The Liebert PowerSure PSI is available in five sizes, including 1000, 1440, 1920, 2200, and 3000VA at 120VAC and 230VAC.

The Liebert PowerSure PSI features an innovative line interactive design incorporating double boost/single buck technology. This protects against utility voltage fluctuation by raising and lowering utility power to the right level needed by the sensitive connected equipment. This allows the UPS to prolong battery life by maximizing its time on utility power before going to battery when the input power exceeds specified input limits.

## **Liebert PowerSure PSI Standard Features:**Reliability:

**Data line surge protection for telephone/fax/DSL/modem** - Liebert PowerSure PSI protects modems, phone, fax, network, Internet, DSL and other communication equipment connected to the UPS via the RJ-45 from incoming spikes and surges.

#### Advance early warning of UPS system status -

Liebert PowerSure PSI offers multiple audible and visual alarms to immediately alert you to an input voltage fluctuation (buck/boost), output overload, high temperature, 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.

#### Full sequenced battery testing -

Liebert PowerSure PSI provides you with three battery testing options: at startup of the UPS; automatic 14-day battery test, and a manual test. Each 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.

#### Lightning and surge protection -

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

LED Indicators on the front of unit provide auick and complete monitorina status



#### Flexibility:

# Seven to eight battery-backed outlets - The Liebert PowerSure PSI versatile design can accept multiple types of connected equipment 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.

#### Optional external battery cabinet -

Extended battery runtime for applications that require longer backup time.

USB, Microsoft Windows (XP and 2000) and MAC (OS X version 10.2 or later) Certified - Assures plug-and-play installation and operation.

#### **Low Total Cost Of Ownership:**

**User-replaceable hot-swappable batteries -** Increase product life and allow quick servicing. Batteries are conveniently located behind the front bezel of the unit.

#### 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.

#### Standard Two-Year Warranty -

Ensures that the UPS will be replaced if it experiences problems during the warranty period.

## Multiple Choices For Communication, Shutdown And Reporting:

#### Serial and Contact Closure Communication Option —

Liebert MultiLink™ 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 Communication Option** — Windows (XP and 2000) and MAC (OS X 10.2 or 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.

#### **SNMP Communication Option** — The Liebert

OpenComms® Web Card provides SNMP and web-based management to your Liebert PowerSure PSI. The card gives you the power to monitor and control your UPS from not only your network management station, but from any PC running Microsoft® Internet Explorer™. Compatible with Liebert OpenComms Nform monitoring and communication software.



Liebert
OpenComms Web
Card for SNMP
allows remote
monitoring,
start-up or restart
for connected
equipment

#### Liebert PowerSure PSI Network Solution Package With Built-In Communications

Your Liebert PowerSure PSI can be ordered network-ready with a factory-installed Liebert OpenComms Web Card for SNMP communications. This totally integrated, cost-efficient solution allows remote monitoring, start-up or restart for connected equipment.



#### Optional Liebert 2U MicroPOD™ Output Distribution And Maintenance Bypass Module

without power, even for scheduled UPS maintenance, Liebert 2U MicroPOD (Power Output Distribution) 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 power disruption.

#### Liebert PowerSure® PSI Specifications

Model Number	PS1000RT2-120	PS1440RT2-120	PS1920RT2-120	PS2200RT2-120	PS3000RT2-120
Model Number with	PS1000RT2-120W	PS1440RT2-120W	PS1920RT2-120W	PS2200RT2-120W	PS3000RT2-120W
Web Card Installed Power Rating, VA/W	1000\/\\\\750\\/	14401/4/100014/	1020\/\\/1500\\/	2200\/\\/1650\\/	2000//4/2250/4/
Dimensions, W x D x H, in (mm)	1000VA/750W	1440VA/1080W	1920VA/1500W	2200VA/1650W	3000VA/2250W
Unit	3.43 x 22 x 17 (87 x 557 x 430)	3.43 x 22 x 17 (87 x 557 x 430)	3.43 x 24.1 x 17 (87 x 612 x 430)	3.43 x 24.1 x 17 (87 x 612 x 430)	3.43 x 24.1 x 17 (87 x 612 x 430)
Weight, lbs (kg)	,	,	,	,	,
Unit	61.7(28.0)	68.2(31.0)	77.0 (35.0)	77.0 (35.0)	81.6 (37.0)
Input AC Parameters					
Surge Protection	570]				
Voltage Range Without	78VAC - 150VAC, configurable				
Battery Operation	. 2				
Frequency Range	10 (1 /2) - 44 - 4 - 4	10 (+ /2) -++	45 - 65 Hz (±0.1 Hz)	10 (4 /2) - 44 1 1	10 (+ /2) -++
Input Power Cord	10 ft. (3m) attached, w/NEMA 5-15 P	10 ft. (3m) attached, w/NEMA 5-15 P	10 ft. (3m), attached, NEMA 5-20 P	10 ft. (3m) attached, w/NEMA L5-30 P	10 ft. (3m) attached, w/NEMA L5-30 P
Output AC Parameters	WINEHINGS 131	WITCHINGS	TELWING EUT	W/INCES 501	WINEIUN CO SO I
Output Receptacles	(8) NEMA 5-15 R	(8) NEMA 5-15 R	(6) NEMA 5-15 R 2) NEMA 5-20 R T-Slot, accepts 15APlug	(6) NEMA 5-15 R (2) NEMA 5-20 R T-Slot, accepts 15APlug	(4) NEMA 5-15 R (2) NEMA 5-20 R (1) NEMA L5-30 R T-Slot, accepts 15APluc
Voltage (Normal mode)	110 / 120 / 127 VAC (configurable) ±10%				
Voltage (Battery Mode)	110 / 120 / 127 VAC (configurable);				
	±5% before low battery warning; ±8% after low battery warning				
Transfer Time	4-6 ms typical				
Waveform	Sinewave				
Frequency (Normal Mode)	45 - 65 Hz (±0.1 Hz)				
Frequency (Battery Mode)		50	or 60 Hz (±5%); auto sens	ing	
Battery Parameters					
Load%	PS1000RT2-120(W)	PS1440RT2-120(W)	PS1920RT2-120(W)	PS2200RT2-120(W)	PS3000RT2-120(W)
Internal Battery Runtime		I			
20%	65 min.	45 min.	52 min.	47 min.	47 min.
40%	37 min.	24 min.	25 min.	23 min.	22 min.
60%	24 min.	14 min.	15 min.	13 min.	14 min.
80%	16 min.	9 min.	10 min.	8 min.	9 min.
100%	11 min.	5 min.	6 min.	5 min.	6 min.
Recharge Time External Battery Cabinet Model Number	PS2-48VBATT	4 hours to 90% of rate PS2-48VBATT	ed capacity, after full disch PS2-72VBATT	PS2-72VBATT	PS2-72VBATT
Internal Battery Runtime + 1 Extern	al Rattery Cahinet				
50%	119 min.	72 min.	105 min.	99 min.	67 min.
100%	46 min.	30 min.	43 min.	40 min.	29 min.
Internal Battery Runtime + 2 Extern		30 111111.	45 mm.	40 111111.	25 111111.
50%	209 min.	133 min.	163 min.	150 min.	129 min.
100%	98 min.	56 min.	89 min.	77 min.	52 min.
Internal Battery Runtime + 3 Extern	al Battery Cabinets	I			
50%	274 min.	209 min.	237 min.	222 min.	168 min.
100%	136 min.	95 min.	128 min.	120 min.	88 min.
Internal Battery Runtime + 4 Extern					
50%	305 min.	257 min.	281 min.	274 min.	222 min.
100%	188 min.	125 min.	150 min.	144 min.	118 min.
Environmental					
Operating Temperature			2°F to + 104°F (0°C to + 40		
Storage Temperature	+5°F to +104°F (-15°C to +40°C)				
Relative Humidity	0% to 95%, non-condensing				
Operating Altitude	Up to 10,000 ft. (3000m) at 95°F (35°C) without derating				
Audible Noise		ernal fan(s) off	<40 dBA, internal fan(s) off		
	<50 dBA, internal fan(s) on <60 dBA, internal fan(s) on				
Agency					
Safety	UL 1778, c-UL Listed				
Surge Immunity	5007	ar cl p	IEEE 587, Category A	FCCD 145 C	
	FCC Part	15, Class B		FCC Part 15, Class A	



















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