


Power Protection for
Business-Critical Continuity

UPStation™ GXT 2U

The New Shape of Network Power Protection



 Liebert.


EMERSON
Network Power

■ The Reliability Of True On-Line Operation, The Configurability Of A Computer

The Liebert GXT 2U UPS system takes the outstanding features and unmatched reliability of Liebert's UPStation GXT series - and puts it all into a smaller 2U size cabinet. As a true on-line UPS, GXT 2U includes power factor correction, internal batteries, frequency conversion, capability unlimited external battery connectability, and internal automatic and manual bypass capability.

The Liebert GXT 2U is designed with the features you need to protect mission-critical equipment from a variety of power problems:

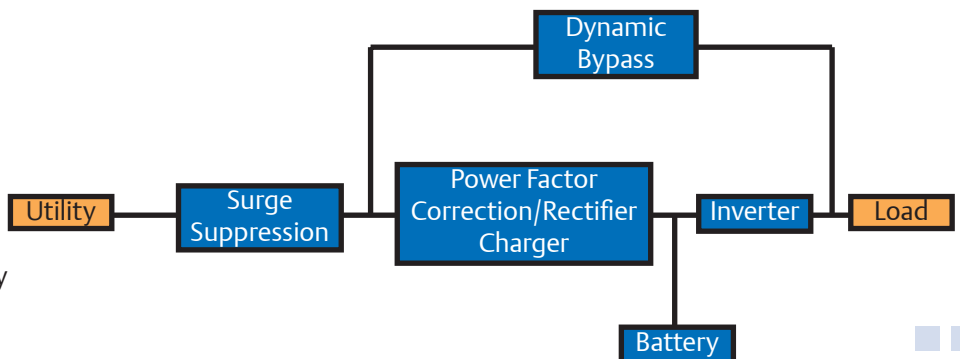
- True on-line design
- Wide input voltage window allows UPS support without going to battery, extending systems availability
- Built in Surge Suppression
- User replaceable batteries without removing GXT 2U from rack
- SNMPv3 compatible
- Compatible with new SNMP/Web Card
- Compatible with Multiport4 or 8
- Compatible with RelayCard INT
- Compatible with MultiLink
- External plug and play, 2U battery cabinets available
- Standard two-year warranty
- Configurable as rack or tower





On-Line UPS Protection for Essential and Critical Applications

The GXT 2U will transfer the critical load to utility power (bypass mode) in the event of adverse conditions within the UPS. This adds an extra measure of reliability and availability to the supported equipment. No additional cabinets are necessary.



■ The Right Features In Just The Right Size

On-line design means zero transfer time from external to internal power. When utility power fails, your critical load remains supported by a seamless flow of power from the GXT 2U.

For maximum control, the GXT 2U is custom configurable to your needs using a specially designed Windows software package. Offered in 700, 1000, 1500, 2000 and 3000 VA capacities, the GXT 2U also provides easy serviceability with user replaceable batteries. This is all available in one of the most affordable UPS systems in its class.

Quality Power

The Liebert GXT 2U is a true on-line power source, so whatever the quality of power coming in – the pure sinewave output meets the exacting standards of your equipment. Unlike other UPS technologies, the GXT 2U's design handles all these potential power problems:

- Power spikes and transients
- EMI/RFI noise
- Voltage sags and brownout conditions
- Harmonics
- Power-factor corrected loads
- Outages

Built-In Reliability

The GXT 2U is designed from the inside out for maximum reliability. It includes operating features that simply are not available on other units in its price range:

Power-factor corrected loads – the GXT 2U maintains stable voltage output even with the power-factor corrected loads typical of modern computer equipment.

Frequency conversion – allows 60Hz input/50Hz output or 50Hz input/60Hz output with no derating.

Unlimited external battery connectability – any number of 2U battery cabinets can be added to supply additional battery time.

Internal automatic and manual bypass capability – assures continuity of power to critical loads during system problems or maintenance.



Sophisticated Protection In An Easy-To-Use Package

The GXT 2U is easy to install... easy to set up... and even easier to use. It features simple operation with a single switch for uncomplicated, error-free start up. A front-mounted panel displays system status, load levels, battery capacity and any alarm conditions.



For maximum flexibility, the GXT 2U can be easily installed as a space-saving, rack-mounted unit or as a compact freestanding tower. This versatility allows it to be used to protect networks, servers, telecommunications equipment or industrial process equipment... just about anywhere.

In order to fully protect your network, a UPS must be able to deal with different types of power input, including imperfect power from your electric utility, the variable output of most standby generators, and harmonics from inside the building or even from your own network equipment. The Liebert GXT 2U is designed to handle these situations. If a UPS can't provide proper protection under these conditions, then it isn't providing complete protection.



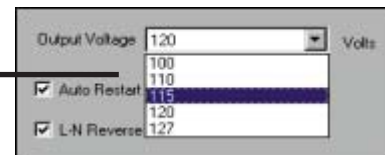
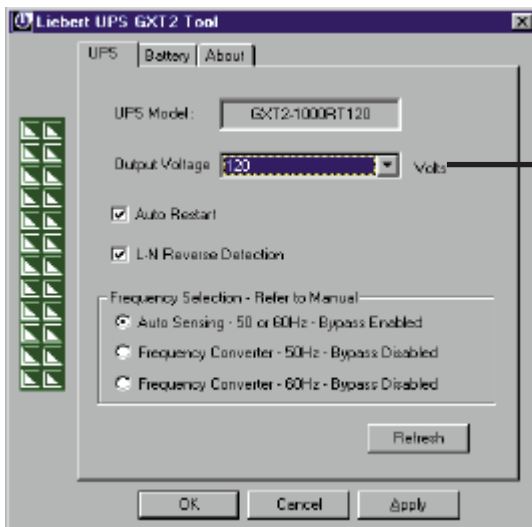
■ A New View On Configuring Your UPS

Each GXT 2U is shipped with Windows® compatible software that allows the user to program a variety of operating parameters. This capability allows you to customize the GXT 2U's performance to your specific requirements, providing a new level of power protection control and adaptability.

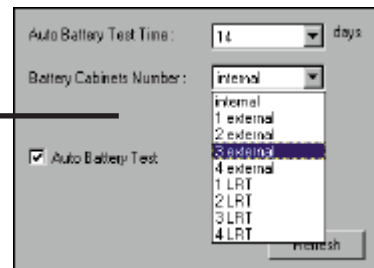
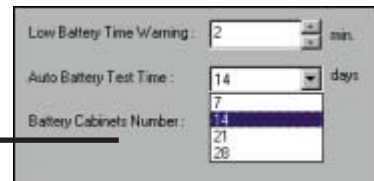
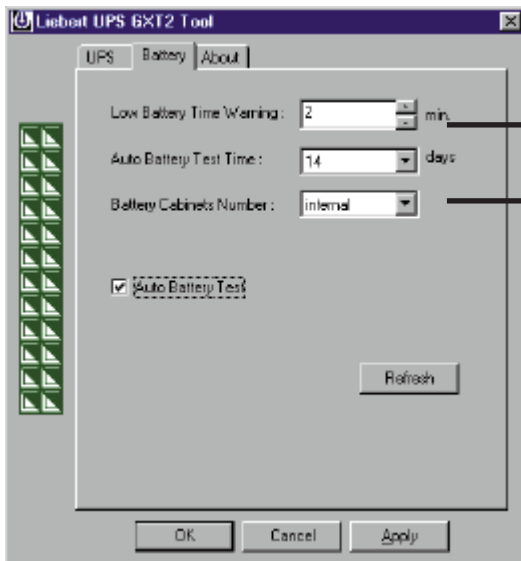
The software allows configuration of the following:

- Output voltage selectable: 200V, 208V, 220V, 230V and 240V.
- Enable or disable auto restart.
- Enable or disable line-neutral reversal detection.
- Select frequency converter mode:
 - 60Hz input/50Hz output with no derating, bypass is disabled
 - 50Hz input/60Hz output with no derating, bypass is disabled
- Change the low battery warning from the standard 2 minutes.
- Select how often you want the automatic battery test to occur.
- Disable automatic battery test if desired.
- Program the UPS for the number of external battery cabinets connected, allowing the UPS to report the correct run time.





- Configure Output Voltage
- Enable/Disable Auto Restart
- Enable/Disable Line Neutral Reversal Detection
- Select Frequency Converter Mode



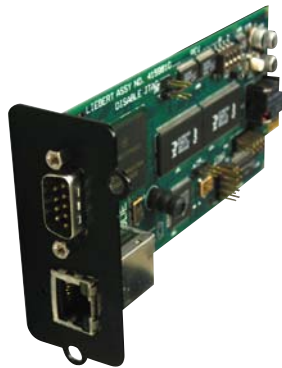
- Select Low Battery Warning Time
- Select Automatic Battery Test Time
- Select Number of External Battery Cabinets
- Enable/Disable Automatic Battery test

■ Communications For Power Monitoring and Control

The GXT 2U offers a variety of communications options to provide the monitoring and control capabilities demanded by today's network computing systems.

Intellislot® SNMP/Web Card

For enhanced UPS communications and control, the Intellislot SNMP/Web Card will deliver SNMP and web-management communications capability to your GXT 2U unit. This feature will provide flexibility in how you monitor and control your UPS over the network. The card is also easily configurable to work in a standard SNMP implementation and with Liebert's MultiLink unattended shutdown software.



SNMP/Web Card monitors a wide range of UPS information, allowing users to monitor, control, and manage their GXT 2U UPS over the network via the Web and SNMP.

MultiLink™ Shutdown Software

Your GXT 2U UPS system can be used with Liebert MultiLink shutdown software. This package automatically shuts down computer operating systems in a smooth and orderly manner if UPS battery capacity runs low.

MultiLink automated shutdown software performs the critical task of protecting information for one computer or a network. It is available in both single and multi-user versions and is designed to run on a wide variety of operating platforms. During an extended utility failure, MultiLink automatically shuts down computer operating systems in a smooth and orderly manner if UPS battery capacity runs low. MultiLink is designed to keep users informed. Notification about critical alarms can be sent to alphanumeric pagers or directly to the computer screen via pop-up messages. MultiLink may be configured for either in-band or out-of-band operation. Using the network to send alarm messages and data can dramatically reduce cable and installation costs. Alternatively, separate communications cables can be run to each computer when network wiring is a concern.



The screenshot shows the MultiLink software interface. The main window is titled "MultiLink" and has a menu bar with "File", "Configure", and "Help". Below the menu bar are three tabs: "Overview", "Event Actions", and "Event Log". The "Event Actions" tab is active, showing a table of events and their configured actions.

Event	Notify	Email	Page	Shutdown	Command	Log	Silence Alarm
UPS Operating On Batt...	✓	✓		✓		✓	
Low Battery	✓	✓		✓		✓	
Battery Capacity 20% or...	✓					✓	
Battery Time Remaining...	✓					✓	
UPS Output Returned...	✓					✓	
UPS Communication Es...	✓					✓	
UPS Communication Lo...	✓					✓	
Battery Fully Charged	✓					✓	

Below the table, there are several configuration options:

- Enable Email Action (with a "Reset to Defaults" button)
- Initial Delay: 0 min 0 sec
- Repeat Count: 0 Repeat Interval: 0 min 0 sec
- Email Subject: MultiLink Notification
- Message: Include Advice
- Event Type: occurred on Date and Time at device "Event Source". Event Description (with "Preview...", "Edit...", and "Default" buttons)
- Recipients: (with "Add...", "Edit...", and "Remove" buttons)
- Edit Global Email Parameters...

At the bottom, it says "Cancelling Event: UPS Output Returned From Battery" and there is a smiley face icon.

Automatic Responses for every UPS event may be customized.

Configuration details appear in the bottom window pane when the event and response type are selected.

■ The Ability To Handle A Wide Range Of Power Input

When your computer system can't be without power, even for scheduled UPS maintenance, a Liebert 2U POD™ ensures continuous uptime. The 2U POD™ provides maintenance bypass capability as well as power output distribution. The 2U POD™ can be used with your GXT 2U UPS system in either the rack mount or tower configuration.

The 2U POD™ allows you to manually transfer your connected equipment to utility power via a maintenance bypass switch, permitting scheduled maintenance or UPS replacement without power disruption. Transferring back to UPS power is equally easy; simply turn the switch to the indicated position and your load is protected by the UPS.

Use of the 2U POD™ offers many benefits:

- Provides utility power to your attached equipment when switched to maintenance bypass mode.
- Allows UPS maintenance or replacement of the UPS without discontinuing power to critical equipment.
- Easily installed – the UPS and utility power are both connected to the 2U POD™ with the supplied cords.
- Rotary switch and LED indicators make the unit simple to operate.

The 2U POD has two modes of operation, UPS mode (UPS available) and utility mode (maintenance bypass). During the UPS mode, the power is being routed through the UPS system as per Figure 1. During the utility mode of operation, power is being routed around (bypassing) the UPS system as per Figure 2, with power being supplied to the connected load through the 2U POD.

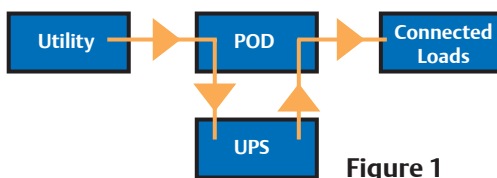


Figure 1

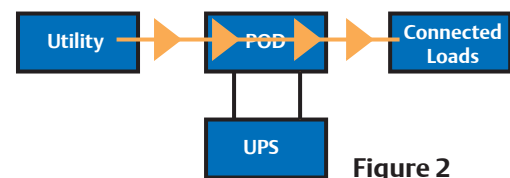


Figure 2



Optional 2U POD™ output distribution and maintenance bypass module ensures continuous uptime, even during UPS maintenance.

Specifications

Model Number	GXT2-700RT230	GXT2-1000RT23	GXT2-1500RT230	GXT2-2000RT230	GXT2-3000RT230
Power Rating VA/W	700/490	1000/700	1500/1050	2000/1400	3000/2100
Technology	Double Conversion True On-Line				
Input AC Parameters					
Voltage Range	230 VAC nominal (119 to 280 VAC variable based upon output load)				
Frequency	40 - 70 Hz; Auto Sensing				
Voltage	200/208/220/230/240 (user configurable) VAC				
Frequency	50 Hz or 60 Hz (user configurable)				
Wave Form	Sinewave				
Output AC Parameters					
Type	Valve regulated, non spillable, flame retardant, lead acid				
Quantity x Voltage X Rating		4 x 12 V x 7.0 x or 7.2 Ah		4 x 12 x 9.0 Ah	6 x 12 V x 9.0 Ah
Hot Swappable Battery	Yes				
Back Up Time					
Typical Load	24 minutes	13 minutes	10 minutes	8 minutes	8 minutes
Half Load	44 minutes	25 minutes	20 minutes	14 minutes	16 minutes
Recharge Time	5 Hours to 95% capacity after full discharge into 100% load				
Connections					
Input Sockets	EN 60320/C14				EN 60320/C20
Output Sockets	(4) EN 60320/C13				(4) EN 60320/C13 (1) EN 60320/C19
D89 Communication Port	Yes (serial communication)				
Dimension and Weight					
Dimension W x D x H	89 x 546 x 432 mm				89 x 615 x 432 mm
Shipping Dimension W x D x H	268 x 692 x 535 mm				
Net Weight	22 kgs	23 kgs	23 kgs	25 kgs	34 kgs
Gross Weight	27 kgs	27 kgs	27 kgs	28.4 kgs	35.4 kgs
Operating Environment					
Operation Temperature	0 C to +40 C (+32 F to +104 F)				
Storage Temperature	-15 C to 50 C (+5 F to +122 F)				
Relative Humidity	0% to 95%, non condensing				
Packaging					
No. of Input Cables Included	Please use the cable provided with your server				1
No. of Output Cables Included	2				
MultiLink Auto Shutdown Software CD	Yes				
MultiLink Communication Cable	Yes				
User Configuration Kit	Yes				
MiniTower Kit	Yes				
Rack Mounting Handles	Yes				
Rack Mounting Support Rails	Optional				
Standard Warranty	2 years				
Extended Warranty	Optional				
Standards and Approvals					
Safety	EN 50091-1-1, CE compliance mark, for both Low Voltage and EMC Directive				
RFI / EMI	EN 50091-2, Class A				
Surge Immunity	EN 61000 4-2, 4-3, 4-4, 4-5				
Transportation	ISTA Procedure 1A				

While every precaution has been taken to ensure accuracy and completeness in this brochure, Liebert Corporation assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

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