



# VERTIV GXT5 Liebert UPS User Manual

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## VERTIV GXT5 Liebert UPS



## Product Information

The Liebert GXT5 is an intelligent and efficient UPS system designed to protect your mission-critical applications. It offers scalable runtime options with matching external battery cabinets for extended uninterrupted power. The UPS provides battery health status and replacement date prediction for intelligent battery health management.

The UPS system is easy to deploy and maintain, thanks to its user-friendly LCD interface and remote

management capabilities supported by the Vertiv RDU101 communications card. It is compatible with Vertiv infrastructure management solutions such as LIFETM Services, environmental sensors, and Vertiv Power Insight.

The Liebert GXT5 features market-leading efficiency and unity power factor operation to meet your critical application needs. It also comes with a standard three-year advanced exchange product warranty for added peace of mind.

### **What's in the box:**

- UPS
- Tower stand
- 4-Post Rack Mounting Kit
- USB Cable
- Quick Start Guide
- Safety Manual
- VertivTM Power Insight management software (free download from Vertiv.com)

### **Key Features:**

- High output power factor = up to 1.0
- Full-color graphic LCD with gravity-sensing orientation
- Individually controllable output power sockets
- External battery cabinets with auto-detection
- Battery health status and replacement date prediction
- Remote management, update, and configuration capabilities
- Optimized thermal management and variable speed fan
- High efficiency in online mode
- Energy Star 2.0 certified
- Even higher efficiency (up to 98%) in Active ECO mode
- Programmable outlets for power cycling hung equipment and optimum battery usage
- Compliance with RoHS and REACH regulations
- Compact rack/tower design
- A broad range of services and extended warranty
- Easy to install, configure, and operate
- VertivTM RDU101 network management support

### **Product Usage**

1. Unbox the Liebert GXT5 UPS along with the included accessories.
2. Choose between using the UPS as a standalone tower or mounting it in a 4-post rack using the provided Rack Mounting Kit.
3. Connect the UPS to your devices using the individually controllable output power sockets.
4. If extended runtime is required, connect external battery cabinets to the UPS. The UPS will automatically detect the battery cabinets.

5. Use the user-friendly LCD interface to monitor the battery health status and replacement date prediction.
6. For remote management, updates, and configuration, use the Vertiv RDU101 communications card and compatible Vertiv infrastructure management solutions.
7. To optimize thermal management, ensure proper ventilation around the UPS and take advantage of the variable speed fan.
8. The Liebert GXT5 operates with high efficiency in online mode. For even higher efficiency, switch to Active ECO mode.
9. Utilize the programmable outlets for power cycling hung equipment and maximizing battery usage.
10. The UPS complies with RoHS and REACH regulations, ensuring its environmental friendliness.
11. The compact rack/tower design allows for flexible installation and space optimization.
12. If needed, contact Vertiv for additional services and extended warranty options.

## Intelligent and Efficient UPS for the Protection of Your Mission-Critical Applications

The Vertiv™ Liebert® GXT5 UPS is an online double conversion UPS solution that offers premium power outage protection and continuous power conditioning in a compact and flexible rack/tower form factor. The Liebert® GXT5 single-phase UPS operates with high power efficiency, making it ideally suited to protect critical infrastructure in both centralized and edge network applications. Scalable runtime options with matching external battery cabinets offer additional flexibility when extended uninterrupted power is required. Plus, the Liebert GXT5 provides battery health status and replacement date prediction for intelligent battery health management.

### Liebert® GXT5 Features

#### Leading UPS Technology

- High output power factor = up to 1.0
- Full-color graphic LCD with gravity-sensing orientation
- Individually controllable output power sockets
- External battery cabinets with auto-detection
- Battery health status and replacement date prediction
- Remote management, update, and configuration capabilities
- Optimized thermal management and variable speed fan

The UPS system is easy to deploy and maintain due to its user-friendly LCD interface and remote management capabilities supported by the Vertiv RDU101 communications card which makes the Liebert GXT5 compatible with Vertiv infrastructure management solutions such as LIFE™ Services, environmental sensors, Vertiv Power Insight, and more. With market-leading efficiency and unity power factor operation, the Liebert GXT5 will meet your critical application needs. You can rest assured that your business is protected with this Vertiv solution that includes a standard, three-year advanced exchange product warranty.

#### Efficient and Green Product

- High efficiency in online mode
- Energy Star 2.0 certified
- Even higher efficiency (up to 98%) in Active ECO mode
- Programmable outlets for power cycling hung equipment and optimum battery usage
- Compliance with the Restriction of Hazardous Substances (RoHS) directive and the Registration, Evaluation,

## **What's in the box**

- UPS
- Tower stand
- 4-Post Rack Mounting Kit
- USB Cable
- Quick Start Guide
- Safety Manual
- Vertiv™ Power Insight management software (free download from Vertiv.com)

## **Solutions Wide**

- Compact rack/tower design
- A broad range of services and extended warranty
- Easy to install, configure, and operate
- Vertiv™ RDU101 network communications card with advanced features
- Compatibility with environmental sensors
- Integrated dry-contacts with selectable definition
- Free Vertiv Power Insight management software
- Serial port for out-of-band management with Avocent® serial consoles
- Automatic internal bypass and external maintenance bypass options

## **Vertiv™ Liebert® GXT5 Features**



**500-1500VA – 120V Rack/Tower**

#### External Battery Connector

Scalable runtime solution supported for extended outage protection

#### 4 x Individually Controllable Receptacle

Manage load on battery and control unauthorized access to UPS receptacle



#### Communications

SNMP, Serial, Dry contact, Local USB  
Local and remote configuration and  
UPS Management

#### NEMA 5/15P input with over current protection

Simple installation and power  
on with connected input cord

### 2000VA – 120V Rack/Tower

#### External Battery Connector

Scalable runtime solution  
supported for extended  
outage protection

#### NEMA L5-20R

Support larger  
devices or rack  
PDU

#### 4x Individually Controllable Receptacle, 2x Always on Receptacles

Manage load on battery and control  
unauthorized access to UPS receptacle



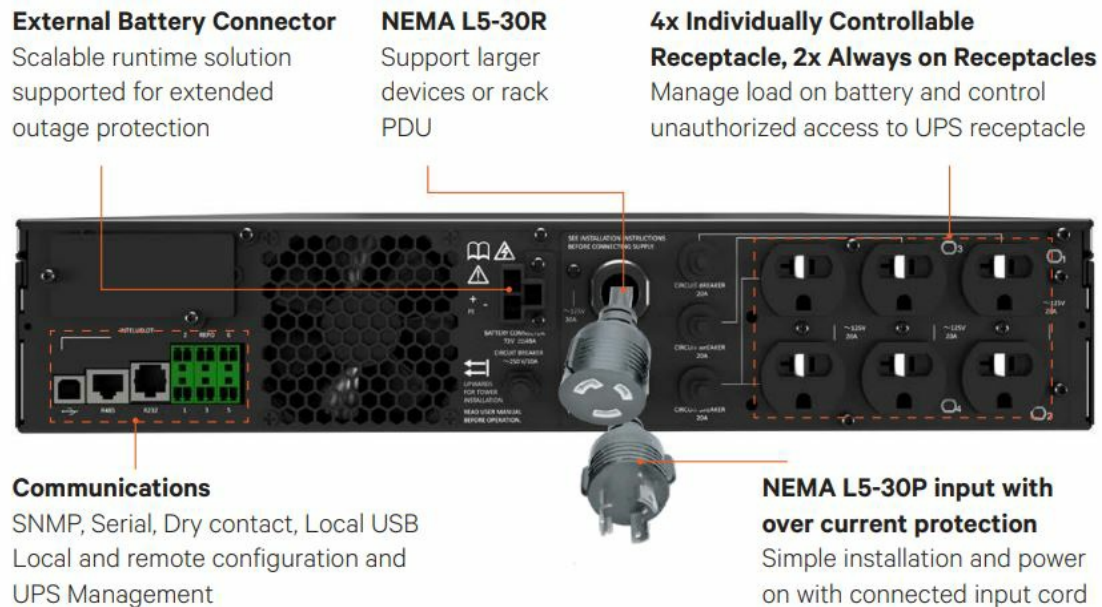
#### Communications

SNMP, Serial, Dry contact, Local USB  
Local and remote configuration and  
UPS Management

#### NEMA L5-20P input with over current protection

Includes NEMA 5-20 Adapter  
Cable for non-locking  
receptacles

### 3000VA – 120V Rack/Tower



## How You Benefit from the Vertiv™ Liebert® GXT5 UPS

### Designed for high availability

- The higher power factor (0.9 – 1.0) ensures the connection of more loads and IT equipment
- With individually controlled output receptacles, you can manage power to individual devices without impacting other critical network equipment operation
- Minimum downtime of the device is provided by hot-swappable, user-replaceable battery modules which can be changed during operation
- LIFE™ Services helps to enhance uptime, as well as operational efficiency with continuous remote monitoring, expert analysis, and proactive response
- Automatic self-test

### User-friendly installation and operation

- Easy-to-read, gravity-sensing graphical color display
- Intuitive user interface for local configuration and management
- Support for the Vertiv™ suite of remote management tools (Vertiv™ Power Insight, RDU101 network interface card, and serial connectivity support)
- Auto-detection of external battery cabinets enables faster deployment and accurate runtime information
- Remote UPS firmware upgrade capability ensures the UPS has the latest features and enhancements

### Longer service life and runtime of the batteries

- Extended runtimes are provided by the addition of external battery cabinets
- Improved battery care by temperature-compensated battery charging
- Intelligent battery health management ensures a longer service life (optimized battery maintenance and replacement when needed)

### Optimized energy and capacity management

- Active ECO operating mode with up to 98% efficiency
- Efficiency in online double conversion mode up to 95%
- Energy Star 2.0 certified
- Four individually programmable output receptacles can be used to extend runtime for the most critical loads and smart disconnection of the less critical ones

### **Seamless connectivity**

- Four onboard, user-definable dry contact I/O for integration of support management systems
- Supports SNMP, web, and environmental sensors with the optional RDU101 communications card
- Serial connection for integration of Avocent® ACS product or direct serial management and control of the UPS

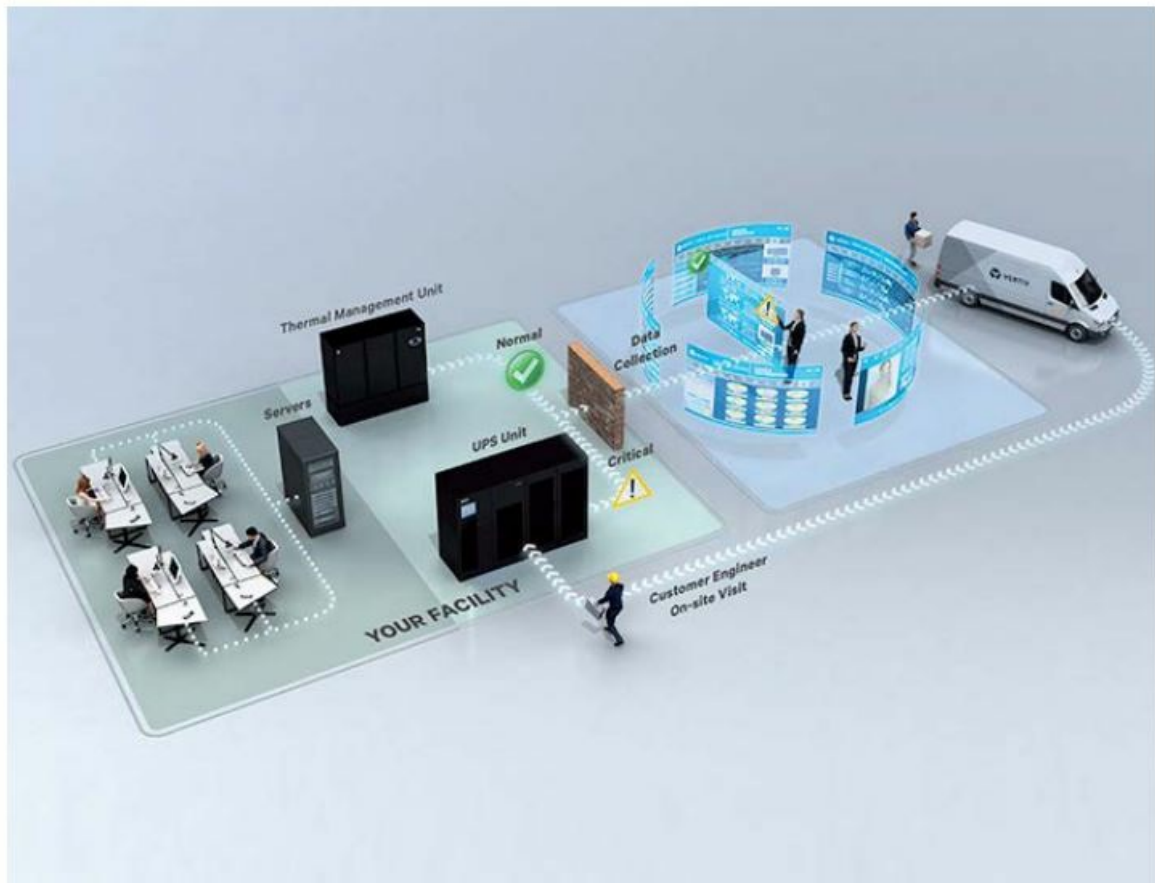
### **Power Assurance Package:**

#### **Comprehensive Service Support for Critical Systems**

- Five-year protection plan with 100% parts coverage and 24×7 emergency service
- On-site installation and startup of UPS and internal batteries (excludes hard-wired applications); configuration of new UPS and accessories; and if purchased, safe removal and disposal of legacy UPS and batteries
- On-site service support is available 24×7 (within 150 miles of the regional service center) and includes 100% labor and travel coverage
- 100% parts coverage for UPS and includes internal batteries, POD (power output distribution), and web card
- 24×7 access to the customer resolution center and online access to the Customer Services Network

#### **Remote Diagnostic Services for Rapid Response**





### Key benefits:

- Hassle-free management of multi-site rollouts
- Frees up time-strapped IT staff by managing and tracking UPS health, maintenance, and service
- Reduces the worry of critical equipment downtime
- Ensures rapid recovery in the event of failure (within 24-48 hours)
- Frees you from the responsibility of handling and documenting the disposal of legacy UPS and batteries

### Uptime assurance

- Continuous monitoring for early detection of trends and operating anomalies
- Analysis and interpretation of alarm and status messages

### Rapid incident response

- Automatic transmission of data for analysis
- Concurrent diagnosis and dispatch of engineer to site
- Shipment of parts for corrective maintenance

### Increased insight and ease of management

- Notification of operating conditions that may impact system health
- Periodic trend and analysis reports
- Integration of remote and on-site services to ensure business continuity

## Technical Specifications

<b>Standard Models</b> <b>Liebert® GXT5-500</b> <b>LVRT2UXL Models with RDU</b> <b>101 Network Card</b> <b>Liebert® GXT5-500LVRT2UXLN</b>		<b>Liebert® GX</b> <b>T5-750LVRT</b> <b>2UXL Liebert®</b> <b>GXT5-750</b> <b>LVRT2UXLN</b>	<b>Liebert® GX</b> <b>T5-</b> <b>1000LVRT2U</b> <b>XL Liebert®</b> <b>GXT5-1000L</b> <b>VRT2UXLN</b>	<b>Liebert® GX</b> <b>T5-</b> <b>1500LVRT2U</b> <b>XL Liebert®</b> <b>GXT5-1500L</b> <b>VRT2UXLN</b>	<b>Liebert® GX</b> <b>T5-</b> <b>2000LVRT2U</b> <b>XL Liebert®</b> <b>GXT5-2000L</b> <b>VRT2UXLN</b>	<b>Liebert® GX</b> <b>T5-3000LVRT</b> <b>2UXL Liebert®</b> <b>GXT5-3000</b> <b>LVRT2UXLN</b>
Ratings (VA/W)	500VA/500W	750VA/750W	1000VA/1000W	1500VA/1350W	2000VA/1800W	3000VA/2700W

## Dimensions, inches (mm)

Unit W x D X H	16.9 x 15.7 x 3.4 (430 x 400 x 85)	16.9 x 15.7 x 3.4 (430 x 400 x 85)	16.9 x 15.7 x 3.4 (430 x 400 x 85)	16.9 x 18.5 x 3.4 (430 x 470 x 85)	16.9 x 18.5 x 3.4 (430 x 470 x 85)	16.9 x 21.3 x 3.4 (430 x 540 x 85)
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## Weight, pounds (kg)

Unit	37 (16.8)	37 (16.8)	37 (16.8)	46.2 (21)	47.5 (21.6)	66(30)
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## Input AC Parameters

Range	Typical 120V Range: 60-150V	Typical 120V Range: 60-150V	Typical 120V Range: 60-150V	Typical 120V Range: 60-150V	Typical 120V Range: 60-150V	Typical 120V Range: 60-150V
Frequency	40-70Hz; Auto Sensing	40-70Hz; Auto Sensing	40-70Hz; Auto Sensing	40-70Hz; Auto Sensing	40-70Hz; Auto Sensing	40-70Hz; Auto Sensing
Input Power Cord	10 ft. attached w/ NEMA 5-15P plug	10 ft. attached w/ NEMA 5-15P plug	10 ft. attached w/ NEMA 5-15P plug	10 ft. attached w/ NEMA 5-15P A plug	NEMA L5-20P or 5-20P plug (5-20P adapter included)	10 ft. attached w/ NEMA L5-30P plug

## Output AC Parameters

Output Receptacles	5-15R × 6	5-15R × 6	5-15R × 6	5-15R × 6	L5-20R+5-20R × 6	L5-30R+5-20R × 6
Typical 120V User selectable output	110/115/120/125VAC (user-configurable); ±3%	110/115/120/125VAC (user-configurable); ±3%	110/115/120/125VAC (user-configurable); ±3%	110/115/120V AC (user-configurable); ±3%	110/115/120V AC (user-configurable); ±3%	110/115/120V AC (user-configurable); ±3%
Waveform	Sine wave	Sine wave	Sine wave	Sine wave	Sine wave	Sine wave
Utility (AC) Mode Overload	>200% for 250ms; 150- 200% for 50 seconds; 125- 150% for 60 seconds; 105-125% for 60 seconds	>200% for 250ms; 150- 200% for 50 seconds; 125- 150% for 60 seconds; 105-125% for 60 seconds	>200% for 250ms; 150- 200% for 50 seconds; 125- 150% for 60 seconds; 105-125% for 60 seconds	>200% for 250ms; 150- 200% for 2 seconds; 125- 150% for 50 seconds; 105-125% for 60 seconds	>200% for 250ms; 150- 200% for 2 seconds; 125- 150% for 50 seconds; 105-125% for 60 seconds	>200% for 250ms; 150- 200% for 2 seconds; 125- 150% for 10 seconds; 105-125% for 15 seconds

## Battery

Type	Valve-regulated, non-spillable, lead acid	Valve-regulated, non-spillable, lead acid	Valve-regulated, non-spillable, lead acid	Valve-regulated, non-spillable, lead acid	Valve-regulated, non-spillable, lead acid	Valve-regulated, non-spillable, lead acid
Backup Time (100% Load)	17.9	10.4	6.7	6.7	4	4
Backup Time (50% Load)	40.4	25.5	17.9	18.8	12.3	12.6
+1 External Battery Cabinet (100% Load)	76.3	45.4	32.6	32.4	22	22.2
+1 External Battery Cabinet (50% Load)	147.8	102.4	76.5	79.7	53.6	54.6

## Environmental Requirements



<b>Warranty</b>	Std. 3 years; Opt. 2 years	Std. 3 years; Opt. 2 years	Std. 3 years; Opt. 2 years	Std. 3 years; Opt. 2 years	Std. 3 years; Opt. 2 years	Std. 3 years; Opt. 2 years
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## Protection Plan

**Equipment Protection Plan: \$500,000**



## Accessories

- **Racks and enclosures:** Support a wide variety of equipment with the Vertiv™ VR Rack including servers, storage, switches, routers, PDUs, UPS units, console port servers, and KVM switches.
- **Rails and mounting hardware:** Install equipment with a four-post rail kit and hardware for mounting in a 19- or 23-inch rack or choose a two-post telecom rack for front- or mid-chassis, wall, or Zero U configuration.
- **Rackmount PDUs:** For basic or intelligent power distribution that helps prevent overloaded circuits in the data center, choose from products such as upgradable PDUs, inline power meters, transfer switches, and monitoring sensors.
- **Extended battery modules:** Enable scalable runtime for support during extended power outage situations by adding reliable power and protection to new or existing deployments.
- **Environmental sensor:** Maintain knowledge of remote environments with temperature, humidity, and leak detection, or monitor available dry-contact sensors for security access control or smoke detection.

#### External battery cabinets and replacement battery kits

UPS	External battery cabinets	Replacement battery kits
GXT5-500LVRT2UXL	GXT5-EBC36VRT2U	GXT5-36VBATKIT
GXT5-750LVRT2UXL	GXT5-EBC36VRT2U	GXT5-36VBATKIT
GXT5-1000LVRT2UXL	GXT5-EBC36VRT2U	GXT5-36VBATKIT
GXT5-1500LVRT2UXL	GXT5-EBC48VRT2U	GXT5-48VBATKIT
GXT5-2000LVRT2UXL	GXT5-EBC48VRT2U	GXT5-48VBATKIT
GXT5-3000LVRT2UXL	GXT5-EBC72VRT2U	GXT5-72VBATKIT



#### Network communications and environmental sensors

Network Communications	RDU101	Intellislot web card for SNMP and web management. Supports environmental sensors.
	IS-RELAY	Intellislot Interface Kit for Relay Contacts
Environmental Sensors	SN-Z01	Integrated cable with single temperature sensor
	SN-Z02	Integrated cable with three temperature sensors
	SN-Z03	Integrated cable with three temperature and one humidity sensors
	SN-T	Modular with single temperature sensor
	SN-TH	Modular with single temperature and single humidity sensor
	SN-2D	Modular with two-door contact inputs
	SN-3C	Modular with three dry contact inputs
	SN-L20	Modular leak zone sensor with 20-foot cable (Liebert RDU-S only)
UPS manageability options	Vertiv™ Power Insight Software Management	Vertiv™ Power Insight is a complimentary web-based software designed to monitor up to 100 Vertiv™ UPSs and rates



### **Liebert® MicroPOD – Maintenance bypass and output distribution**

The Liebert® MicroPOD (Power Output Distribution) is a maintenance bypass option for UPS products, 3 kVA and below. It allows the removal of the UPS without powering down the connected equipment. The 2U PODs can be installed on the floor or mounted to a Liebert® GXT5 UPS using the included mounting brackets.

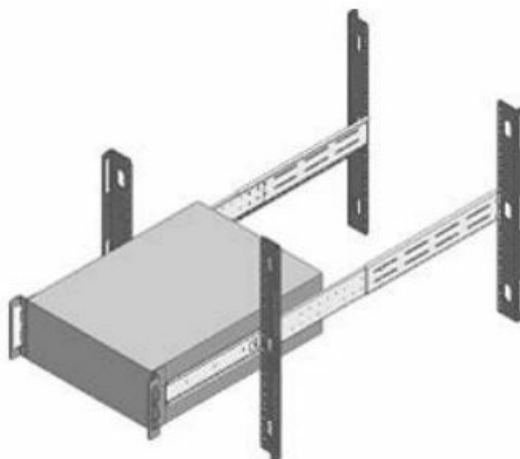


UPS VA rating	POD model number	Output receptacles	Plug to utility
500-1500VA UPS	MP2-115HW	Hard Wired	Hardwired
	MP2-115A	8 x 5-15R	5-15P
2000VA UPS	MP2-120HW	Hard Wired	Hardwired
	MP2-120C	8 x 5-15/20R	5-20P
	MP2-120E	4 x 5-15/20R; 1 x L5-20R	5-20P
3000VA UPS	MP2-130HW	Hard Wired	Hardwired
	MP2-130C	8 x 5-15/20R	L5-30P
	MP2-130E	2 x 5-15/20R; 1 x L5-30R; 4 x 5-15/20R	L5-30P
	MP2-130P	4 x 5-15R; 2 x L5-20R	L5-30P

- 2POSTRMKIT

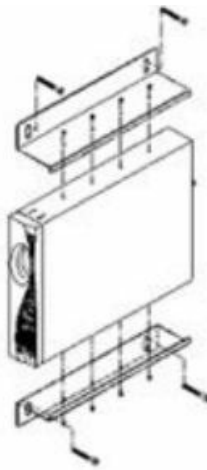


- Rack Slide Kits for all Liebert® GXT5 Rack Tower Models (RMKIT 18-32)

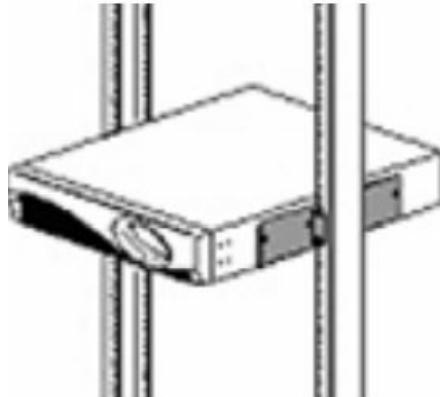


- Wall Mount Bracket Kit for Liebert® GXT5 500VA – 3000VA models WMBKT2U and WBMKT2U-SS

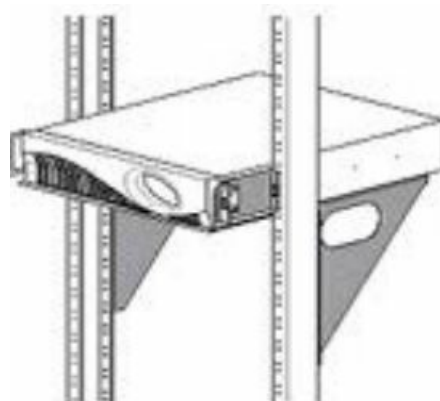




- 2UTELECOMRKIT



- Rack Shelves – Center mount shown RS600 / RS800



- Standard Kit included inside the UPS box 201193G1L



## Mounting Kit Options

Application	Model Supported	Style	Model	Description
2 Post rack	Liebert® GXT5 UPS family (500VA to 10kVA)	Shelf	RS500	Flush-mount shelf for 19" rack wide
		Shelf	RS600	Center-mount shelf for 19" rack wide
		Shelf	RS700	Flush-mount shelf for 23" rack wide
		Shelf	RS800	Center-mount shelf for 23" rack wide
	Liebert® GXT5 up to 3kVA	Bracket	2UTELECOM RKIT	Only center-mount bracket for 19" rack wide
		Bracket	2POSTRMKIT	Front flush/ center-mount bracket – 4-piece design
Wall Mount	Liebert® GXT5 up to 3kVA	Bracket	WMBKT2U	Wall mount bracket holds (1) GXT5 2U or (1) PSI5 2U product, steel painted black
		Bracket	WMBKT2USS	Wall mount bracket holds (1) GXT5 2U or (1) PSI5 2U product, stainless steel
4 Post rack	Entire Liebert® GXT5 UPS family (500VA to 10kVA)	Bracket	RMKIT18-32	Cabinet/racks with 18" – 32" deep support rails – Telescopic rail

**Note:** RS600 and RS800 kits include adapter brackets for installation of up to (2) Liebert® GXT5 2U model

## Liebert® GXT5 UPS – Power Assurance Services

### Power Assurance Package

Bundled Start-up Service AND 5-Year On-site Emergency Response	Standard	With LIFE™ Services	With Removal	With LIFE™ and Removal
Equipment Model / Type	Part Number	Part Number	Part Number	Part Number
Liebert® GXT5 UP TO 3 KVA	PAPGXT-1K3K	PAPGXT-1K3KL F	PAPGXT-1K3KRMV	PAPGXT-1K3KRLF
External Battery Cabinet (36V or 48V or 72V)	PAPGXT-BATT	N/A	PAPGXT-BATT RMV	N/A

### Power Startup Services

<b>Startup Service Only</b>	<b>Standard</b>	<b>With Removal</b>
<b>Equipment Model / Type</b>	<b>Part Number</b>	<b>Part Number</b>
Liebert® GXT5 UP TO 3 KVA	SUGXT-1K3K	SUGXT-1K3KRMV
External Battery Cabinet (36V or 48V or 72V)	SUGXT-EXTBTCB	SUGXT-EXTBTCBRMV

### **Power Emergency Services**

<b>5-Year On-site Emergency Coverage – Only</b>	<b>Standard</b>	<b>With LIFE Services</b>
<b>Equipment Model / Type</b>	<b>Part Number</b>	<b>Part Number</b>
Liebert® GXT5 UP TO 1 KVA	PEPGXT-1K5YR	PEPGXT-1KLF
Liebert GXT5 1.5 kVA	PEPGXT-15005YR	PEPGXT-1500LF
Liebert GXT5 2.0 kVA	PEPGXT-20005YR	PEPGXT-2000LF
Liebert GXT5 3.0 kVA	PEPGXT-30005YR	PEPGXT-3000LF
External Battery Cabinet 36V	PEPGXT-36VBAT5YR	N/A
External Battery Cabinet 48V	PEPGXT-48VBAT5YR	N/A
External Battery Cabinet 72V	PEPGXT-72VBAT5YR	N/A

### **Power Assurance Package – Summary**

- Includes all below “Power Start-up Services” and “Power Emergency Services” support
- One Preventative Maintenance visit after 3rd year (5-10kVA UPS only)

### **Power Startup Services – Summary**

- Installation includes mounting and start-up of new UPS or EBC (excludes hard-wired applications)
- Services performed by Vertiv factory-trained technician
- Services performed 7 X 24, excluding national holidays within the 48 contiguous states and Hawaii
- Removal and disposal of existing UPS or EBC equipment, if selected

### **Power Emergency Services – Summary**

- On-Site Service Support
- Full-service five (5) year contract term commencing upon the start-up date
- 100% parts coverage, including internal batteries, POD, and web card
- 100% labor and travel coverage 7 days/week, 24 hours/day
- 24-Hour Customer Resolution Center via 1-800-LIEBERT
- Access to Customer Services Network portal

**LIFE™ Services include the above plus:**

- Continuous Monitoring, Expert Analysis, and Proactive Response


**Note:** LIFE Services requires an RDU101 card, which is included on all 5000VA to 10000VA models. Please refer to the Scopes of Work for full and additional details.

[Vertiv.com](https://www.vertiv.com)

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SL-70414 (R04/23)

**Documents / Resources**

	<p><a href="#">VERTIV GXT5 Liebert UPS</a> [pdf] User Manual GXT5 Liebert UPS, GXT5, Liebert UPS, UPS</p>
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