

■ AC Power
For *Business-Critical Continuity™*

Liebert® GXT3, 5kVA-10kVA UPS

Compact UPS Systems For High Power Network Rack Applications



Liebert GXT3, 5kVA-10kVA UPS Systems: Big Protection, Small Package

Today's converged networks require increased availability and reliability. This has created a need for higher density power protection systems that adapt to mixed load voltages and plug types, while remaining easy to install and maintain.

New IT technologies, such as VoIP and PoE, have greatly increased power demands. Unfortunately, as these requirements have risen, the amount of space available for your protected equipment and related power support systems has not.

The Liebert Solution

Liebert GXT3 UPS meets the need for higher power capacities in small spaces. This true on-line double conversion UPS system is available in 5kVA – 10kVA models, and features integrated maintenance bypass, as well as optional extended battery runtime. Add support — Emerson Network Power Service — and it all equals greater power assurance and reliability.

Designed for use in either rack or tower configurations, all units offer the smallest available solutions for these power capacities — the 5 & 6kVA model at 120/208V output in 4U size, or the 8 & 10kVA unit 120/208V output in a 6U package. A 6kVA 208V output 5U size model is also available.

To help meet the need for choosing a single supplier for global applications, 220V, 230V and 240V 50/60 Hz models are offered with CE and C-tick markings.

Dual Voltages For Multiple Applications

Simultaneous output voltages of 240/120, 208/120, 230/115, 220/110, or 200/100 VAC provide the flexibility to adapt to multiple load requirements without the need to add additional transformers that take up extra space and add weight. Input power factor correction to 0.99 reduces current harmonics and their heating effects.

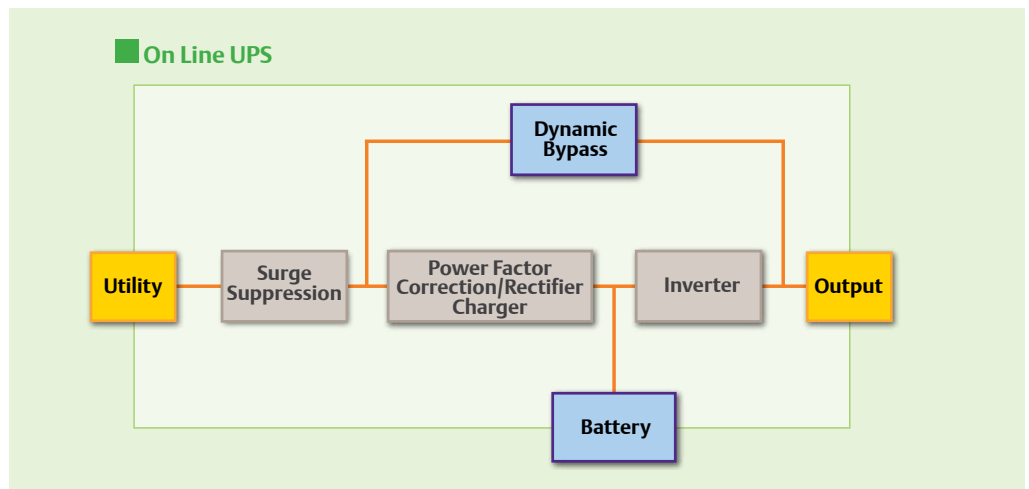
Communications For Power Monitoring And Control

Liebert GXT3 UPS offers a variety of communications options to provide the monitoring and control capabilities demanded by today's network computing systems. Operation can be monitored using:

- Liebert IntelliSlot Web Card provides SNMP and web-based monitoring and control of your UPS.
- Liebert MultiLink™ Automated System Shutdown Software
- Liebert Nform™ Monitoring System
- Liebert Universal Monitor And Remote Power Monitor Panels
- Third-Party Monitoring Systems



Liebert IntelliSlot Webcard provides SNMP and web-based management



UPS operation and display panel can rotate 90 degrees, which provides upright viewing for users.



Liebert GXT3 UPS Includes These Outstanding Features:

Flexibility:

- **Rack/tower configuration.** The versatile unit installs in either configuration, and includes a rotating LED display panel that conforms to the desired orientation.
- **Automatic frequency detection.** Detects and matches line input frequencies of either 60 or 50 Hz.
- **User replaceable hot-swappable internal batteries.** Provide four minutes of runtime at full load.
- **Additional runtime with additional battery cabinets.** UPS cabinet includes rear panel plug-and-play connections for optional battery cabinets. Cabinet sizes: 5-6kVA – 2U, 8-10kVA – 4U, 6kVA 208V – 3U
- **Liebert IntelliSlot™ communications port.** Utilizes Liebert IntelliSlot Web Card to provide SNMP and web-based monitoring and control of your UPS.
- **Includes Windows-based configuration program.** Allows various operating parameters to be adjusted and tests to be scheduled.
- **Built-in USB communications for use with Liebert MultiLink™ Automated Shutdown Software.** Allows you to monitor communication between the UPS and a server, and ensures a graceful unattended shutdown.
- **Built-in closure signals.** Provides notification to monitoring systems of operating conditions including: on battery, low battery, battery mode shutdown and any mode shutdown.
- **Emergency Power Off (EPO).** Terminal connections for a normally open or normally closed emergency power off switch.

Higher Availability:

- **Wider input voltage window minimizes battery use.** Features a wide input voltage window that allows the UPS to support the critical load without having to transfer to battery, extending system availability for when battery back-up is truly needed.
- **Internal automatic and manual bypass.** Assures continuity of power to critical loads during system maintenance or in case of internal fault.
- **Self-diagnostics.** Automatically tests unit electronics and batteries. Designed to simplify maintenance and troubleshooting.
- **Standard two-year replacement warranty.** No-hassle warranty provides paid shipping both ways. Optional one-year and three year extensions available.
- **Uses less rack space.** Leaves more room for network equipment.
- **For longer service life.** Shields batteries from heat generating electronic components, enhancing battery life.
- **Battery cutoff voltage** Automatically adjusts based on load, extending battery life by preventing over-discharge of batteries.

Lowest Total Cost Of Ownership:

Liebert Power Assurance Package Offers A Worry-Free UPS Solution For Your Network

Liebert GXT3 5-10kVA UPS systems may be purchased as part of the Liebert Power Assurance Package. While today's smaller, rack-based UPS systems offer relatively trouble-free operation, the growing criticality of the systems they support has increased the cost of downtime. As a result, the need to maintain these smaller UPS systems is increasingly important.

This all-inclusive package offers you complete peace-of-mind for five years including:

UPS — A compact, high quality on-line Liebert GXT3 UPS (5, 6, 8 or 10kVA).

Start-up — On-site system start-up by a certified Emerson Network Power Customer Engineer, scheduled anytime, 24 x 7. This includes removal and disposal of your existing UPS.

Preventive maintenance — One preventive maintenance visit completed in year 3 by a certified Emerson Network Power Customer Engineer includes 100% Parts Coverage — even internal batteries.

Full parts coverage — Your on-line Liebert UPS benefits from 100% parts coverage for five years, including all internal batteries.

On-site service — Should you experience a problem, we will dispatch a certified Emerson Network Power Customer Engineer to repair or replace your equipment — with 4-hour response guaranteed.

5 Or 6kVA Of True On-Line Power In A Compact 4U Package

Liebert GXT3 5 & 6kVA models are true on-line UPS systems that provide internal batteries and dual output voltage. They are an ideal fit for applications where the power requirements are demanding — but rack space is limited — delivering 5kVA (4kW) or 6kVA (4.8kW) of power in a single 4U size cabinet. This cabinet size is well suited for installations such as network closets or small data centers.

Adaptable Design

For installation flexibility, the Liebert GXT3 5 & 6kVA models allow you to choose from several different wiring configurations made possible by the use of removable power distribution boxes that simply plug into the rear of the UPS. The standard box provides terminal blocks for hardwired input and output connections. An optional hardwire version that includes a maintenance bypass is also available.

When the ease of plug-and-play power connections is desired, optional versions of the power distribution box convert Liebert GXT3 5 & 6kVA units to a cord-type input with receptacles for output distribution, and also offers maintenance bypass capability that allows hot-swapping of the entire UPS. The UPS has an adaptable dual inverter design, capable of providing simultaneous output voltages of 240/120, 208/120, 230/115, 220/110, or 200/100 and an output power factor of 0.8.



■ 5 & 6 kVA Model shown in rack mount position



PD2-HDWR ships standard with the unit and is hardwire input/output



PD2-HDWR-MBS is an optional hardwire input/output POD with maintenance bypass



Pluggable input/output PODs available with maintenance bypass



■ 6 kVA Model shown in tower position with optional battery cabinet

8kVA And 10kVA Of Power In Just 6U Of Space



■ 8 & 10 kVA Model shown in rack mount position



■ 10 kVA Model shown in tower position with optional battery cabinet



The internal battery packs are hot-swappable, and user replaceable. The unit also supports up to four external battery cabinets for extended run time.



UPS is hardwire input/output with maintenance bypass and includes no POD standard.



Optional PODs available

This Liebert GXT3 8 & 10kVA units offer a flexible solution for protecting rack-mount equipment, including VoIP and PoE. Especially designed for use with the new generation of high power switches, these compact UPS systems pack 8kVA (7.2kW) or 10kVA (9kW) of power into a 6U rack/tower package with flexible output voltage and optional output distribution. The UPS includes built-in, user-replaceable batteries for up to four minutes of runtime at full load.

Adaptable Design

The UPS has a dual inverter design, capable of providing simultaneous output voltages of 240/120, 208/120, 230/115, 220/110, or 200/100 and an output power factor of 0.9. The new 6U cabinet is the smallest for 208/120 selectable voltage in the 8-10kVA size. The unit features integrated internal manual and automatic maintenance bypass, power module, battery modules, auto detection of extended battery cabinets and optional plug-and-play distribution plates.

The standard 8 & 10kVA models include terminal blocks for hardwired connections of both input and output. Optional power distribution modules are available to add output receptacles to the rear panel of the unit.

Hot-Swappable Operation

Liebert GXT3 8 & 10kVA units feature three bays for one power module and two battery modules. The chassis contains a bypass switch that allows all modules to be removed without powering down the connected load.

Product specifications

UPS specifications—5, 6, 8 and 10 kVA models

| Model Number | GXT3-5000RT208 | GXT3-6000RT208 | GXT3-8000RT208 | GXT3-10000RT208 |
|---|-------------------------------------|----------------|--------------------------------------|-----------------|
| Model Rating | 4000W/5000VA | 4800W/6000VA | 7200W/8000VA | 9000W/10000VA |
| Dimensions, Rack Mount, W x D x H Unit in. (mm) | 16.9 x 26.1 x 6.8 (430 x 662 x 173) | | 16.9 x 26.5 x 10.3 (430 x 672 x 261) | |
| Weight Unit, lb (kg) | 56.2 (25.5) | | 78.3 (35.5) | |

Input AC Parameters

| | |
|---------------------------------------|--|
| Nominal Operating Frequency | 50 or 60Hz (Factory Default is 60Hz) |
| Factory Default VAC | 120/208VAC |
| Factory Default L1-N, L2-N VAC | 120 VAC nominal |
| Input Frequency w/o Battery Operation | 40 - 70 Hz |
| Input Power Connection | Hardwire Terminal Block 3W + G (L-L-N-G) |
| L1-N, L2-N Maximum Allowable VAC | 150VAC |

Output AC Parameters

| | |
|----------------------------------|-----------------------------|
| Factory Default VAC | 120/208V AC |
| Factory Default L1-N, L2-N VAC | 120VAC nominal |
| User Configurable L1-N, L2-N VAC | 100/110/115/120/127VAC, ±2% |

Overload Rating

| | |
|---------------------|-------------------|
| 105% to 130% | 1 Minute |
| 131% to 150% | 10 seconds |
| 151% to 200% | 1 second |
| >200% (impact load) | At least 5 cycles |

Environmental

| | |
|-------------------------|---|
| Operating Temp, °F (°C) | 32 to 104 (0 to 40) |
| Storage Temp, °F (°C) | 5 to 122 (-15 to 50) |
| Audible Noise | Less than 55dBA at 3.2ft. (1m) rear; less than 50dBA at 3.2ft. (1m) front and sides |
| Operating Elevation | Up to 10,000 ft. (3000m) at 104°F (40°C) without derating |
| Relative Humidity | 0% to 95%, non-condensing |

Agency

| | |
|----------------|--|
| Safety | UL 1778, c-UL Listed |
| RFI/EMI | FCC Part 15, Subpart B, Class A, FCC Class A |
| Surge Immunity | IEEE/ANSI C62.41 Category A & B |
| Transportation | ISTA Procedure 1A |

Internal battery specifications

| Model Number | GXT3-144BATKIT | GXT3-288RTBKIT |
|-------------------------------------|-----------------------------------|------------------------------------|
| Used with UPS Model | GXT3-5000RT208 / GXT3-6000RT208 | GXT3-8000RT208 / GXT3-10000RT208 |
| Dimensions, W x D x H, Unit in (mm) | 8.1 x 19.3 x 2.8 (206 x 490 x 70) | 8.1 x 19.7 x 5.3 (207 x 500 x 135) |
| Weight, Unit lb (kg) | 75.8 (34.4) | 71.2 (32.3) |

Battery Parameters

| | | |
|--|---|-----------------------|
| Type | Valve-regulated, non-spillable, lead acid | |
| Kit Quantity x Battery Quantity x V x Rating | 2 x 6 x 12V x 9.0 AH | 2 x 12 x 12V x 9.0 AH |
| Battery Mfr / Part # | Yuasa / REW 45-12 | |
| Recharge Time | 3 hours to 90% capacity after full discharge into 100% load | |

Environmental

Operating Temp, Storage Temp, Operating Elevation, and Relative Humidity: Same as UPS

External battery cabinet specifications

| Model Number | GXT3-144VBATT | GXT3-240VBATTUL | GXT3-288RTBATT |
|---|---|--|--|
| Used w/UPS Model | GXT3-5000 & GXT3-6000RT208 | GXT3-6000RTL630 | GXT3-8000 & GXT3 10000RT208 |
| Dimensions, W x D x H, Unit (with bezel) in. (mm) | 16.9 x 26.1 x 3.3 (430 x 662 x 85) | 16.9 x 22.6 x 5.1 (430 x 574 x 130) | 16.9 x 26.5 x 6.8 (430 x 672 x 173) |
| Weight, Unit lb (kg) | 99.9 (45.3) | 94.8 (43) | 29.8 (13.5) |
| Battery Parameters | | | |
| Type | Valve-regulated, non-spillable, lead acid | | |
| Kit Quantity x Battery Quantity x Rating | 2 x 6 x 12V x 9.0 AH | 2 x 10 x 12V x 9.0 AH | 2 x 12 x 12V x 9.0 AH |
| Battery Mfr., Part # | Yuasa / REW 45-12 | | |
| Environmental | Operating Temp, Storage Temp, Operating Elevation, and Relative Humidity: Same as UPS | | |

Power distribution box specifications: GXT3-5000RT208, GXT3-6000RT208 and GXT3-6000RTL630

| Power Distribution Box Model Number | PD2-HDWR | PD2-HDWR-MBS | PD2-001 | PD2-002 | PD2-003 | PD2-004 | PD2-005 | PD2-005 | PD2-L630 |
|-------------------------------------|------------------------------|--------------|------------------------------|-----------|------------------------------|-----------|------------------------------|-----------|-------------------------------|
| Dimensions, W x D x H, Unit in (mm) | 5.2x15.5x3.5 (132x393x88) | | 5.2x15.5x3.5 (132x393x88) | | 5.2x15.5x3.5 (132x393x88) | | 5.2x15.5x3.5 (132x393x88) | | 4.7x13.2x4.1 (119x335x105) |
| Weight, lb (kg) | 5.1 (2.3) | 6 (2.7) | 8.8 (4) | 8.6 (3.9) | 8.6 (3.9) | 9.9 (4.5) | 10.6 (4.8) | 9.5 (4.3) | 8.8 (4) |

Electrical Specifications

| | | | | | | | | | |
|-------------------------|--|---------------------------------------|-------------------------|------------------------|--------------------------|--------------------------|------------|--------------------------|------------|
| Amp Rating | 30A 2-pole input breaker for UPS input power | | | | | | | | |
| Input Power Connections | Hardwire Terminal Block 3W + G (L-L-N-G) | [1] L14-30R on a 3.2m cord | | | | | | | (1) L6-30P |
| Output Power Connection | Hardwire Terminal Block 3W + G (L-L-N-G) | (4) 5-20R (1) L14-30 (1) L6-30R | (2) 5-20R (2) L6-20R | (4) 5-20R (2) L6-30 | (4) L5-20R (2) L5-30R | (4) L5-20R (2) L6-30R | (4) L6-20R | (2) L6-20R (2) L6-30R | |

Power distribution box specifications for GXT3-8000RT208 and GXT3-10000RT208

| Power Distribution Box Model Number | PD2-101 | PD2-102 | PD2-103 | PD2-104 | PD2-105 | PD2-106 |
|-------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Dimensions, W x H, Unit in. (mm) | 7.4 x 5.7(188 x 145) | 7.4 x 5.7(188 x 145) | 7.4 x 5.7(188 x 145) | 7.4 x 5.7(188 x 145) | 7.4 x 5.7(188 x 145) | 7.4 x 5.7(188 x 145) |
| Weight, Unit lb (kg) | 4.4 (2) | 6.6 (3) | 6.6 (3) | 6.6 (3) | 4.4 (2) | 6.6 (3) |

Electrical Specifications

| | | | | | | |
|-------------------------|---|-------------------------|-------------------------|---------------------------------------|---------------------------------------|--------------------------|
| Amp Rating | 2-pole 60A Input Breaker | | | | | |
| Input Power Connections | Hardwire Terminal Block 3W + G (L-L-N-G) to Chassis | | | | | |
| Output Power Connection | (2) L6-30 (8) 5-20R | (4) L6-20R (4) 5-20R | (4) 5-20R (4) L6-30R | (4) 5-20R (2) L6-30R (2) L6-20R | (4) 5-20R (2) L5-30R (2) L5-20R | (4) L6-20R (4) L5-20R |

Battery run time, minutes

| | | Run Time, Minutes | | | | |
|------------------|------|-------------------|----------------|-----------------|----------------|-----------------|
| | Load | GXT3-5000RT208 | GXT3-6000RT208 | GXT3-6000RTL630 | GXT3-8000RT208 | GXT3-10000RT208 |
| Internal Battery | 10% | 105 | 100 | >90 | 150 | 90 |
| | 20% | 50 | 41 | 60 | 57 | 42 |
| | 30% | 30 | 23 | 40 | 34 | 26 |
| | 40% | 22 | 17 | 27 | 25 | 18 |
| | 50% | 16 | 12 | 21 | 18 | 13.5 |
| | 60% | 12 | 10 | 16 | 14 | 11 |
| | 70% | 10 | 7 | 13 | 12 | 8 |
| | 80% | 8 | 5.5 | 11 | 9 | 7 |
| | 90% | 6 | 4.5 | 9 | 8 | 6 |
| | 100% | 5 | 4 | 8 | 7 | 4.5 |

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