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■ AC Power for
Business-Critical Continuity

Liebert® ITA 6-40 kVA



 **Liebert**


EMERSON
Network Power



Regardless of your size, you can't afford for your critical business systems to go down and you can't waste time recovering your IT infrastructure after a disruption.

Emerson Network Power, a division of Emerson, is a global company that combines technology with design to supply innovative solutions for the benefit of its customers. Emerson Network Power is the leader in the **"business-critical continuity"** field, thanks to the company's products and services. Emerson Network Power's broad technology base and global expertise support a full spectrum of enterprise-wide solutions for today's vital business needs.

Leave that to us, the experts in business-critical continuity; from grid to chip, from the biggest to the smallest data centers, we are ready to serve your needs with the solutions we have developed.

Liebert ITA delivers Efficiency Without Compromise™

Efficiency Without Compromise™ provides a path to optimize data center infrastructure around design, operating and management efficiencies - while maintaining or improving availability. This is achieved through the proper selection and utilization of cooling, power and monitoring technologies, supported by key services and local expertise.



INFRASTRUCTURE MANAGEMENT
Improving performance of the IT infrastructure and environment



HIGH DENSITY
Delivering architectures from 10-60kW/Rack to minimise space and costs



ECO AVAILABILITY
Balancing high levels of availability and efficiency



FLEX CAPACITY
Adapting to IT changes for continuous optimisation and design flexibility.

Liebert® ITA 6-40 kVA



Features and Performances

- ☑ 0.9 output power factor
- ☑ Double conversion efficiency up to 95%
- ☑ Easy site installation and configuration
- ☑ Ecomode efficiency up to 98%
- ☑ Active input power factor correction (PFC)
- ☑ Input current total harmonic distortion correction (THDi) < 5%
- ☑ High capacity battery charger
 - 10-20kVA ~ 4.5kW
 - 30-40kVA ~ 6kW
- ☑ Input/output and bypass circuit breakers
- ☑ Integrated manual bypass
- ☑ Integrated parallel load bus and synchronization port (LBS)
- ☑ 3X3 /3X1 Configurability

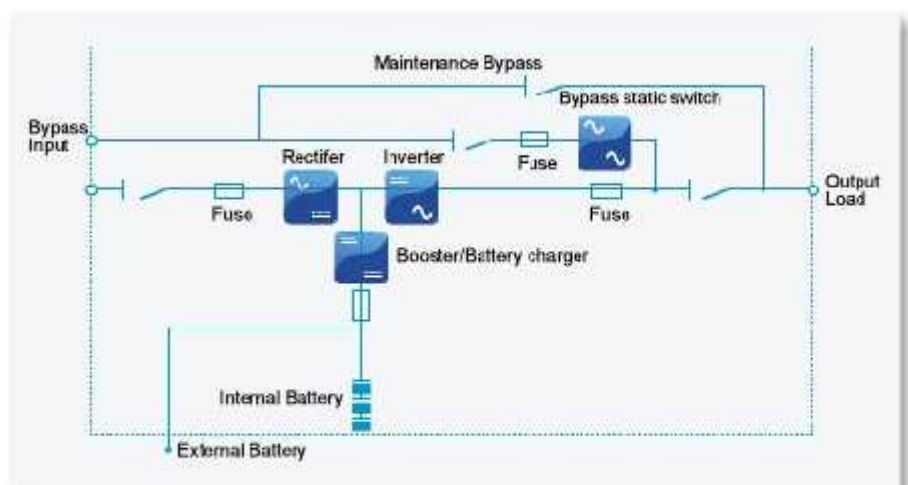
Compact, Reliable Power

Liebert® ITA offers reliable and flexible secure power in a fully integrated package solution. It comes complete with highly efficient transformer-free double conversion technology allowing it to provide installation and operating cost savings.

With a rated output power factor of 0.9, the Liebert® ITA is also able to provide 11% more active power than a traditional 10-10 kVA UPS. Liebert® ITA combination of performance features, impressive

integrated autonomy and compact footprint make it ideal for guaranteeing clean, continuous power for a wide range of applications. Especially for IT application and communication network based application

Liebert® ITA achieves up to 95% efficiency in double conversion mode and up to 98% in Eco mode ensuring effective load protection while reducing the total cost of ownership (TCO) and environmental impact.



Liebert® ITA Single-line diagram

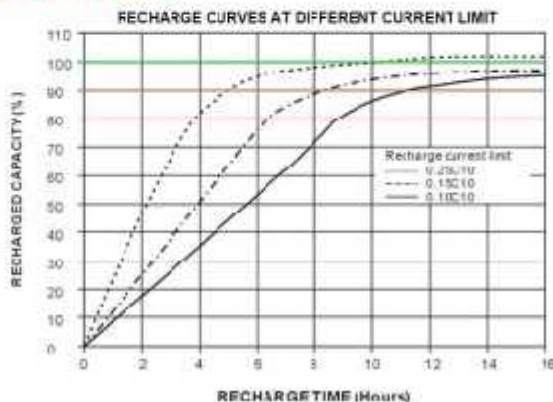


In The Field

Integrated autonomy

The Powerful 6 kW battery charger of the Liebert® ITA allows the reduction of battery re-charging time and increases its ability to manage longer back up times.

Charging Capacity



This means... it will recharge the same battery approx...

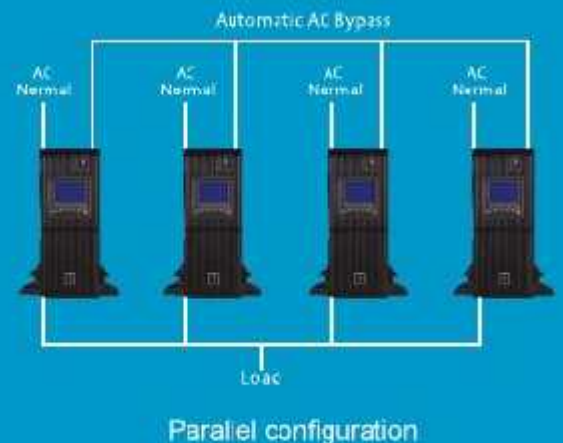
- 1.4 times faster than a UPS with 3 kW of charging power
- 2 times faster than an UPS with 2 kW of charging power

... alternatively... it will charge a battery 1.4 to 2 times larger (Ah) in the same amount of time.

Parallel Ready

Liebert® ITA can be connected with up to four units in parallel, one of which is redundant. A single unit can be upgraded to parallel operation via easy to modify software settings which allow the system to be customized for the requested configuration.

The Loop BUS connection used in paralleling the system delivers ultimate reliability and eliminates the possibility of a single point of failure, ensuring perfect load sharing and fast detection of any variation in the system status.



Communication

Liebert® ITA features a multi-lingual user interface allowing close control and monitoring of system status and performance.

The UPS offers the following communication features:

- ☑ Voltage - free contact ports
- ☑ USB interface
- ☑ Internal Intellislot for SNMP or Modbus communication



These communication capabilities make Liebert® ITA compatible with any building management system.

Software Connectivity



Liebert Multilink™ / site monitor software prevents unexpected server shutdowns and minimizes downtime warning of pending power losses and initiating safe shutdown of operating systems if required.



Liebert Nform™ / site monitor network communications systems enables customers to leverage the distributed monitoring capabilities of network connected equipment providing centralized management of distributed systems.



Serviceability

The architecture of the Liebert® ITA is designed to optimize installation and simplify service with its easily removable power assembly. This architecture considerably minimizes the time needed for repairs and optimizes service ability.





Emerson Network Power Services has the ability to service your equipment, wherever and whenever it's needed. We maintain the 'health' of your data center as well as optimize your existing network infrastructure by helping you implement best practices that can cut down its energy consumption.

Whenever, wherever and for whatever reason, if you need answers or assistance, we will be ready to make sure your system is up and running.

Installation and Startup Services

Emerson Network Power guarantees that your equipment will be up and running immediately once delivered to your doorstep. We give you confidence that your equipment is at optimum performance.

Standard Warranty Service

Emerson Network Power always makes it a point to only deliver reliable products in the marketplace. Nevertheless, Emerson guarantees one year standard warranty support coverage on each product sold to you.

Extended Warranty Service

Peace of mind provided by Emerson Network Power certified service and support experts. With our Extended Warranty Service package, count on us and consider it solved. Risk Free, low cost and better ROI.

Power Assurance Package

The Power Assurance Package bundles a number of key service elements with a Liebert GXT 4.5/6/10kVA UPS. It combines the best UPS in the business with the industry's premier service capability to offer you convenience, information and increased uptime.

Data Center Audit

The Data Center Audit Program is a half-day audit of your data centre, during which an Emerson expert in data centre design and operations compares your infrastructure against more than 50 industry best practices, and identifies your overall risks and capacity challenges.

Data Center Environment Assessment

Data centers continue to dynamically grow both in number and size. This growth rate is spurred by the increasing number of powerful servers installed in data centers and the demands of supporting equipment such as cooling and power.

Preventive Maintenance Service

Emerson Network Power's preventive maintenance program helps you maximize the reliability and performance of your power systems and provides you total peace-of-mind. Emerson's trained and certified technicians will implement this service through use of proper tools and genuine parts to ensure longer system reliability.

Remote Monitoring Service

Capture critical systems data and turn it into action with the remote monitoring service from Emerson. A proven reliable means to know the health and status of your critical infrastructure from alarm notification to custom escalation plans and proactive diagnosis.

Technical Specifications

| Capacity | 5 kVA | 10 kVA | 20 kVA | 30 kVA | 40 kVA |
|--|--|---|--|-----------------------------|------------|
| Input Parameters | | | | | |
| Rectifier Type | IGBT Rectifier | | | | |
| Rated Voltage | 230/400 Vac Single Phase Three Wire/Three Phase Four Wire | | 400 Vac Three Phase Four Wire | | |
| Input Voltage Range | Single Phase 120Vac-276Vac | Single Phase 120Vac-288Vac | Three Phase 228Vac-478Vac | | |
| Input Freq Range | 45 Hz-55Hz | 45 Hz-65 Hz | 40 Hz-70Hz | | |
| Input Power Factor | ≥0.99 for Single Phase/0.95 for Three Phase | | ≥0.99 at Full Load | | |
| THDI | <6% | | <5% | | |
| Battery | | | | | |
| Battery Type | Lead Acid Maintenance Free | | | | |
| Charging Capability | <3 H of recharging of Standard Model | <6 H of recharging of Standard Model | Max Charging Power 4.5 kW | Max Charging Power 6 kW | |
| No of Battery | 16 Nos 12 Volt Battery | | 32/34/36/38/40 - 12 Volt Battery | | |
| Output Parameters | | | | | |
| Rated Power | 5kVA/4.8kW | 10kVA/9kW | 20kVA/18kW | 30kVA/27kW | 40kVA/35kW |
| Rated Voltage | Single Phase 230/220 Vac | | Three Phase 380/400/415 Vac and Single Phase 230/220 Vac | Three Phase 380/400/415 Vac | |
| Voltage Precision | 3% | | 1% | | |
| Output Frequency | 50 Hz, 60 Hz | | | | |
| Frequency Precision | 0.25% | | | | |
| Output Voltage THD | <3% for Linear Load and <5% for Non Linear Load | | <2% for Linear Load and <5% for Non Linear Load | | |
| Load Crest Factor | 3:1 Comply with IEC 62040-3 | | | | |
| Step Load Performance | 100% | | | | |
| Output Mode | Terminal Strip | | | | |
| Overload Performance (% of Rated Load) | 1 Min for Rated 125% Load | 105%-125% 5Mins, 125%-150% 1Min 500ms for >150% | 105%-125% 5 Mins, 125%-150% 1Min >150% for 200ms | | |
| System parameters and Standards | | | | | |
| Conversion Type | Online Double Conversion | | | | |
| Parallel Mode | 3+1 | | | 1+1 | |
| Installation Mode | Rack/Tower Convertible | | | | |
| System Efficiency | >92% | >92.5% | Up to 94.5% | | |
| Switching Time | 0 msec | | | | |
| Noise | >50dB | >55dB | >58dB | | |
| LCD Display | Yes (Optional) | | Yes (Standard) | | |
| Safety | IEC/EN62040-1-1 | | | | |
| Electromagnetic Compatibility | IEC/EN62040-2, IIC/EN61000-3-11, IEC/EN61000-3-12, YD/11095-2008 | | | | |
| Surge Protection | IEC/EN62040-2, meeting IEC/EN61000-4-5 | | | | |
| Protection Level | IP20 | | | | |
| Dimension (mm) | 430x625x85 | 435x640x85 | 435x750x130 (3U) | 484.6X800X176 | |
| Net Weight (kg) | 17.8 | 21.5 | 35 | 72 | |
| Communication and Management | | | | | |
| Interface Type | USB/Intelligent Slot (Dry Contact Card/SIC Card/Modbus Card/RS485 Card) | | | | |
| Management Software | Site Monitor | | | | |
| Environmental Parameters | | | | | |
| operating Temp | 0-40 Degree Celsius | | | | |
| Relative Humidity | 5-95% Without Condensation | | | | |
| Max Altitude | <1500 meters | | <2000 meters | | |

List of optional parts

| Name of optional part | Remark |
|---------------------------------|--|
| Battery module | 2U, suitable for 6 to 20kVA equipment with sixteen 12V cells |
| SIC card | Network monitoring SIC card, used for remote TCP/IP Web monitoring supporting remote shutdown. It has expanded port to get access to temperature and humidity sensor |
| Optional communication parts | Dry contact card |
| | Modbus card |
| | RS485 card |
| Rail/rack | Expensible rail, applicable to all kinds of server cabinet, load capacity 50kg |
| Parallel cable component | Parallel communication cable component (required for parallel system), Suitable for 6 to 10kVA equipment, providing additional 10A charging current and used for quick charging for ultra-long backup time (>4h) |
| 10A charger module | |
| LCD panel | Suitable for 6 to 10kVA equipment, used for field substitution of LED panel and displaying UPS operation status in both Chinese and English |
| Temperature sensor | Temperature sensor with LCD display, can be connected to a SIC card |
| Temperature and humidity sensor | Temperature and humidity sensor with LCD display, can be connected to a SIC card |
| SiteMonitor software | Monitoring software in network version, divided as 3 nodes, 5 to 20 nodes and no restriction version |

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2013



Frost & Sullivan "Voice Of Customer" 2013

- Most Preferred UPS Brand - IT/ITES
- Most Preferred UPS Brand - Manufacturing & Process Industries
- Most Preferred UPS Brand - Power, Oil and Gas
- Overall Customer Service Leadership (Above 20kVA) Award



GIC CHOICE 2013 Awards

- (Centre Of Recognition & Excellence) Most Preferred Brand
- Data Center (UPS)
- Tower Distribution
- Infrastructure Appliance

2013 (Global recognition)

FMA Radar Report™ for Data Center Infrastructure Management Most Comprehensive DCIM Solution - Trellis

2012 (Global recognition)

Forrester's March 2012: "Market Overview: Data Center Infrastructure Management Solutions" report
Dominant supplier in data center infrastructure management (DCIM)

2012 (APAC recognition)



Frost & Sullivan "Asia Pacific Market Share Leadership 2012" - data centre cooling solutions market

2010 Frost & Sullivan

"India UPS Market Leadership Award"



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

For disposal of Batteries Please visit the below link:
<http://www.cocb.nic.in/divisionsofheadoffice/hwmd/lead.pdf>

Note: Specifications & Features may vary based on the condition.

Emerson Network Power.

The global leader in enabling Business-Critical Continuity™.

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

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EMR/AC Power / Liebert 80 Net (30k to 500 kW) / 25.04.13

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