AC Power for
Business-Critical Continuity

Liebert® ITA 5-40 kVA

Compact, Efficient, and Reliable Power Solution

Liebert®

EMERSON™
Network Power

We are Emerson

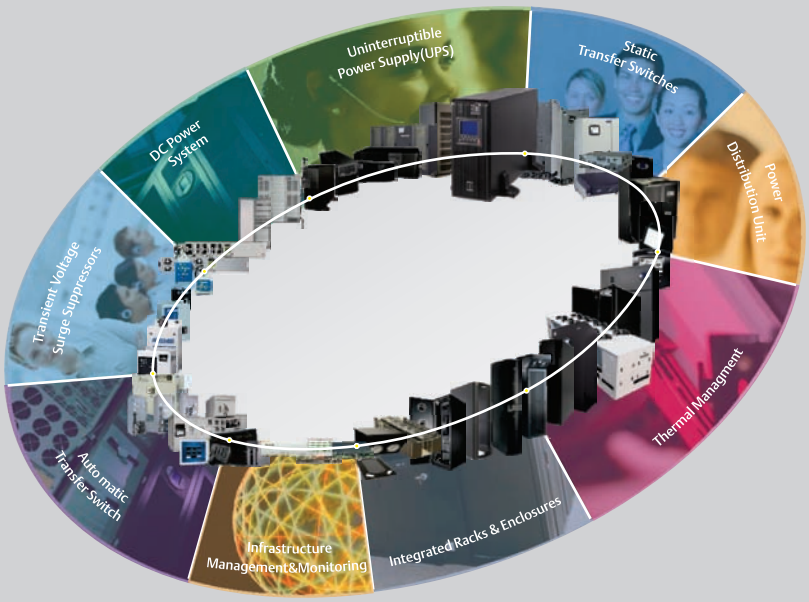
Emerson Network Power, a business of Emerson, a global company that leads by applying a unique combination of industry expertise, technology, and resources to make the future of our customers' enterprises and networks possible.

Emerson Network Power's broad technology base and global expertise support a full spectrum of enterprise wide solution for today's business needs . We have been providing tailored solutions for protecting the operation of critical electronic systems in virtually every business segment right from customer premise equipment to global network .

Emerson.
Consider It Solved.

Customers call on Emerson when the stakes are the highest.
Why?
Because they know that we bring them technology and engineering to create solutions for their success.
Whatever their challenge, they know that with Emerson by their side, they can "Consider It Solved."

.



Supported by our right combination of knowledge, experience, product selection and service capability.
We are the true solution provider of our customer's IT infrastructure, right from grid to chip level.

When the stakes are high, partner with Emerson Network Power to optimize your technology with "high-nines" reliability solutions specific to your infrastructure.

Liebert® ITA 5-40 kVA

Features and Performances

- IGBT Based Rectifier
- Advanced DSP Based Technology
- 0.9 outpur power factor
- Double conversion effciency up to 95%
- ECO mode efficiency up to 98.5%
- Input Power factor up to 0.99
- Total Current Harmonic Distortion (THDi) < 5%
- High capacity battery charger
  - 10-20kVA ~ 4.5kW
  - 30-40kVA ~ 6kW
- Dynamic Design; Rack/Tower convertible
- ITA 5-20kVA scalable up to 4 units in N+X configuration
- Integrated parallel load bus and synchronization port (LBS)
- Phase compatibility
  5/6/10kVA: 1/1 or 3/1 phase
  20kVA: 3/1 or 3/3 phase
  30/40 kVA: 3/1 or 3/3 phase
- Comprehensive value added options including LPD, UPD etc
- Easy site installation and configuration

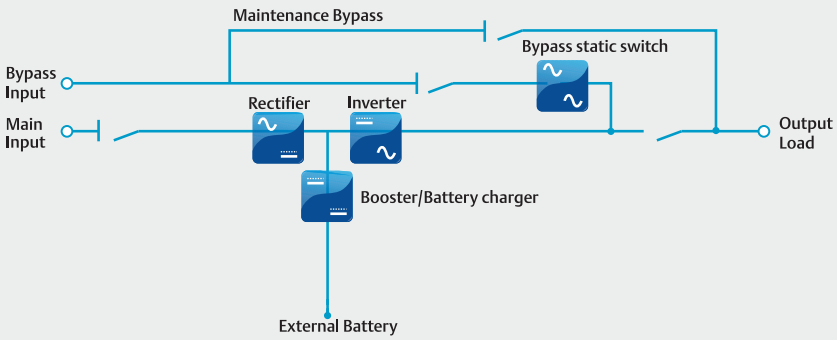
*Available in ITA 20/30/40kVA

Liebert ITA is a full featured transformer free scalable UPS designed to offer compact, efficient and reliable power to power thirsty modern electronic gadgets. It features double conversion online design that ensure continuous high quality power even when the main AC power fails

Utilize state of the art technology and components to withstand fluctuation of input main voltage. Extra wide input voltage and frequency range effectively reduces the discharging period of battery; thus prolong battery life

Deliver 0.9 Power factor that can power 10-20% more load then traditional UPS, makes it suitable for latest server models. Additionally its high power density allows the rack to have a smaller footprint. Liebert ITA uses soft-wire parallel operation mode without the need for complex parallel subrack, allowing the user to save on system cost

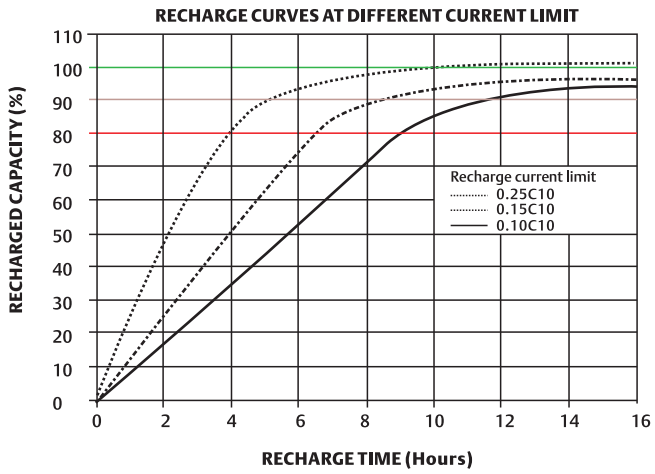
Liebert ITA achieves up to 95% efficiency in double conversion mode and up to 98.5% in ECO mode ensuring effective load protection while reducing the total cost of ownership(TCO) and environmental impact



Liebert®ITA 20-40kVA with UPD Single-line diagram

Exemplary Charging Capacity

The powerful battery charger of the liebert® ITA allows the reduction in battery recharging time . Liebert® ITA back up time can be prolong through cascaded connection or use of large capacity battery bank

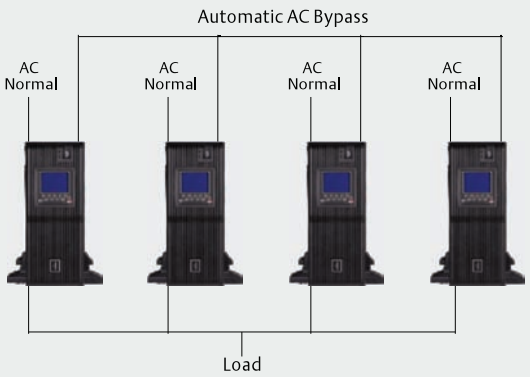


This means...it will recharge the same battery approximately
1.4 times faster than a UPS with 3kW of charging power
2 times faster than an UPS with 2kW of charging power
Alternatively, it can charge a battery of 1.4 to 2 times larger capacity (Ah) in the same amount of time

Parallel Ready

Liebert® ITA 5-20 kVA can be connected with up to four units parallel in N+X configuration , 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 confguration. 30/40 can be connected upto two units in parallel

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



Parallel configuration

Communication And Option

Liebert® ITA offers the following communication features:

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.

Dry Contact card
Dry contact for UPS, providing four relay signal outputs

Modbus card
Select it when UPS needs to communicate with the building management system

RS 485 card
IT helps tp connect UPS to RDU-A monitoring unit. Alternatively, it can be used to realisse cascaded communication in parallel mode

SiteMonitor software
Monitoring software in network version, divided as 5 nodes, 5 to 20 nodes and no restriction version

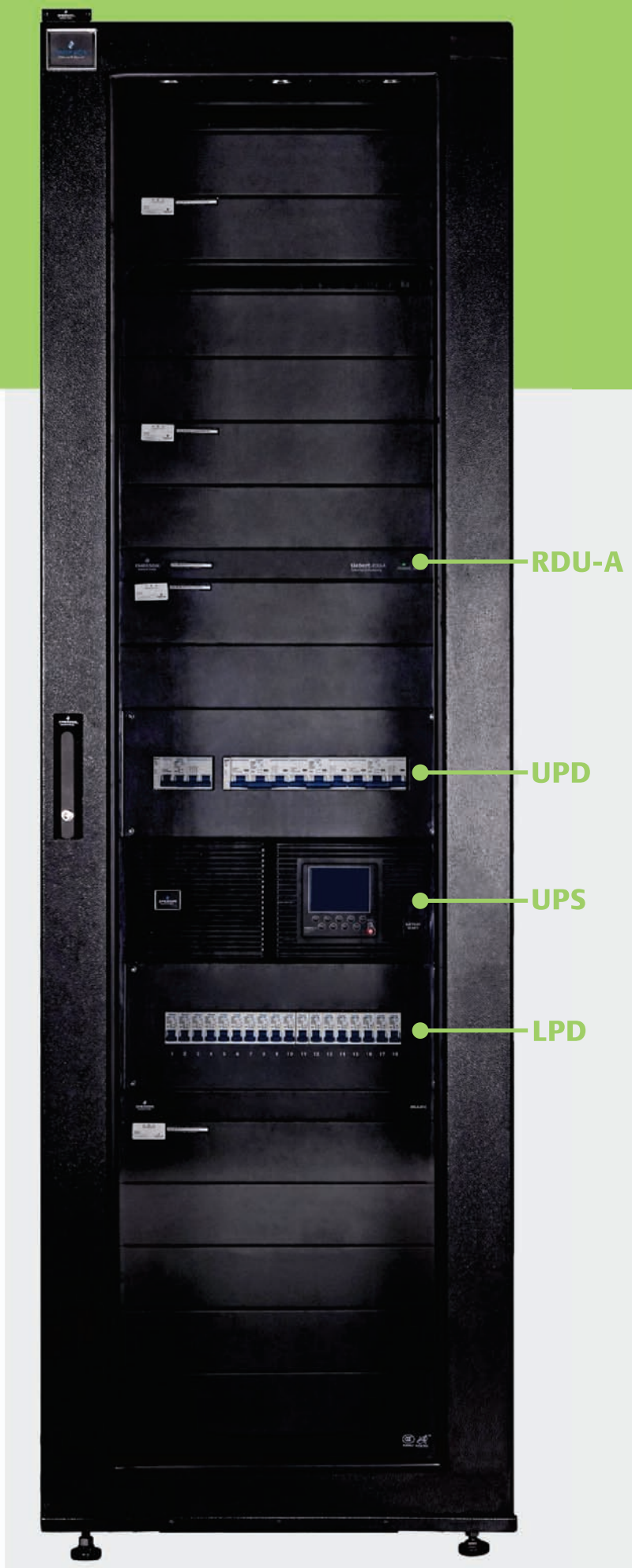
Rail/rack
Expansible rail, applicable to all kinds of server cabinet

10A charger module
Suitable for 6 to 10kVA equipment, providing additional 10A charging current, used for quick charging of ultra-long backup time (>4h)

LCD panel
Suitable for 6 to 10kVA equipment, used for field substitution of LED panel and displaying UPS operation

Temperature & humidity sensor
With LCD screeen, the SIC card is needed to connect the temperature & humidity sensor

Battery module
2U, suitable for 6 to 20kVA equipment, with sixteen 12V cells

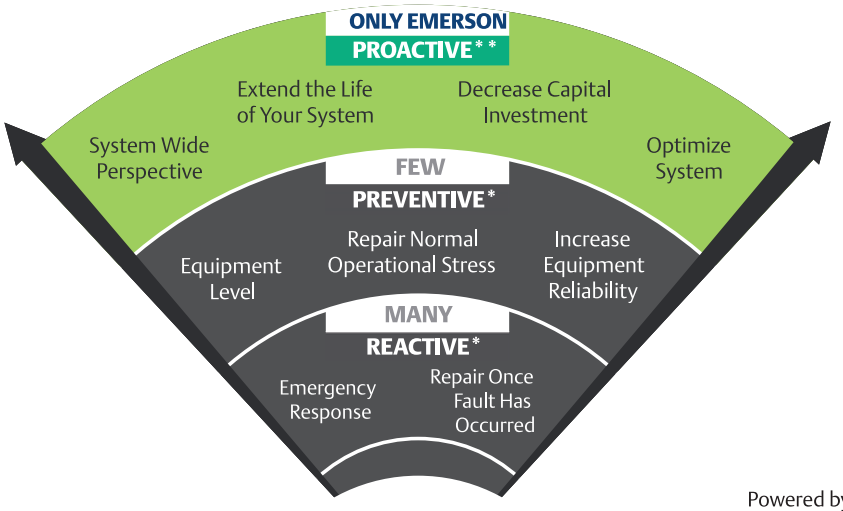


SUPPORT

Maximizing the performance and effciency of your data center's uninterruptible power supply (UPS) and other power distribution systems requires they be properly maintained by factory-trained technicians.

Emerson Network Power, Liebert® Services has the only service organization in the world that has been factory trained on Liebert power equipment and is continuously supported and updated by the engineers who built the equipment.

Our Customer Engineers have a better knowledge of how to maintain Liebert equipment and integrate it into the overall data center infrastructure support strategy than any service provider.



The Emerson Difference

Many Services organizations can perform basic repair activities and maintain equipment at the some level of competency ,but Emerson Network Power services can take your critical maintenance to the next level -proactive maintenence that can significantly extend the life of you power systems

Powered by
LIFE®.Technology
Remote diagnostic system

Emerson Network Power, Liebert Services

Industry Experience
As long as data centers have existed, Liebert Services has been supporting data center infrastructure and providing integrated services for mission-critical environments.

System Wide Expertise
Nobody understands Liebert power equipment, precision cooling units and electrical infrastructure better than the experts at Liebert Services.

Technical Expertise
Our knowledge of systems and how they integrate into your overall facility makes us uniquely qualifed to apply the latest technology and best practices to your power, precision cooling, and battery systems.

Unparalleled Responsiveness
With Liebert Services, you have 24/7 access to a network of data center infrastructure specialists armed with the knowledge and parts to resolve your problems. Anytime. Anywhere.

Fast, Efficient Problem Resolution
Only Liebert Services offers the right combination of industry, system, and technical expertise along with the extensive resources necessary to identify and understand any data center need and provide proactive solutions.

Liebert® ITA Technical Specification

Capacity	5 kVA	6 kVA	10 kVA	20 kVA	30 kVA	40 kVA
Input Parameters						
Rectier Type	IGBT Rectifier					
Rated Voltage	220/380Vac single-phase three-wire/ three-phase four wire			380Vac, three-phase four wire		
Input voltage range	Single-phase 120Vac-276Vac / Three-phase 228Vac-478Vac		Single-phase 120Vac-288Vac / Three-phase 228Vac-478Vac	Three-phase 228Vac-478Vac	Three-phase 305Vac-477Vac	
Input Freq Range	45 Hz - 55 Hz		45 Hz - 65 Hz	40 Hz - 70 Hz		
Input Power Factor	0.95 for Three Phase / >=0.99 for single Phase			>0.99 at Full Load		
Battery						
Battery Type	Lead Acid Maintenance Free					
Charging Capability	<3 Hr of recharging of Standard Model		<6 Hr of recharging of Standard Model	Max Charging Power 4.5kW	Max Charging Power 6kW	
No of Battery	16 Nos of Battery			30 - 40 (Selected on Site)		
Output Parameters						
Rated Power (kVA/kW)	5kVA/4.5kW	6kVA/4.8kW	10kVA/9kW	20kVA/18kW	30kVA/27kW	40kVA/36kW
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%		
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)	105%-125%; 1min		105%-125%; 5 Mins, 125%-150%; 1Min	105%-125%; 5 Mins, 125%-150%; 1Min		
System parameters and Standards						
Conversion Type	Online Double Conversion					
Parallel Mode	3+1				1+1	
Installation Mode	Rack/Tower Convertible					
System Efficiency @100%	Up to 91%		Up to 93%	Up to 94%	Up to 95%	
Noise (dB)	<50dB		< 55dB	< 58dB		
LCD Display	Yes (Optional)			Yes (Standard)		
Safety	IEC/EN62040-1-1					
Electromagnetic Compatibility	IEC/EN62040-1-2, IEC/EN61000-3-11, IEC/EN61000-3-12, YD/T1095-2008					
Surge Protection	IEC/EN62040-2, meeting IEC/EN61000-4-5					
Protection Level	IP 20					
Dimension (mm)	430x625x85		435x640x85	435x750x130(3U)	484.6x800x176	
Net Weight (kg)	17.8		21.5	35	72	
Communication Option						
Interface Type	USB/Intelligent Slot (Dry Contact Card/ Modbus Card/ RS 485 Card					
Management Software	Site Monitor					
Environmental Parameters						
Operating Temp*	0 - 40°C					
Relative Humidity	5-95% without Condensation					
Max Altitude	<1500m(when the altitude exceeds 1500m, derating is required according to GB/T3859.2)			<2000m (when the altitude exceeds 2000m)	≥1000 (derate power by 1% per 100m when above 100m)	

*Specifications are subject to change without any prior notification

Country Office
Emerson Network Power (India) Private Ltd.
Plot No. C-20, Road No. 19, Wagle Estate,
Thane (W), Maharashtra - 400 604. India.
Tel.: 91-22-33154400
Fax: 91-22-25828358
Toll Free No 18002096070
Email: marketing.india@emerson.com

2014

CIO CHOICE 2014 Awards (Centre Of Recognition & Excellence) Most Preferred Brand
- Integrated Data Center Solution
- ICT Infrastructure Cooling
- Data Center Infrastructure Management

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

2013

CIO CHOICE 2013 Awards (Centre Of Recognition & Excellence) – Most Preferred Brand
- Data Center (UPS)
- Data Center (Cooling)
- Power Distribution
- Infrastructure Appliance

2013 (Global recognition)

EMA 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'

ISO 9001

ISO 14001 REGISTERED

DNV Certification B.V., The Netherlands

2013 FORTUNE WORLD'S MOST ADMIRED COMPANIES
Emerson Among Top 50 On Fortune Survey Of "Worlds Most Admired" Companies.

For disposal of Batteries Please visit the below link:
http://www.cpcb.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™.

www.emersonnetworkpower.com

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

EMERSON. CONSIDER IT SOLVED.™