

Liebert ITA Series (5-20KVA)

True On-Line Double Conversion Parallelable UPS

Liebert ITA Series is a full featured scalable UPS designed to provide long backup time for small computer rooms and network equipment. Using true on-line double conversion UPS technology, Liebert ITA Series provides high efficiency and reliability with 0.9 output power factor that can power 10-30% more load than other ordinary UPS. This UPS offers flexibility with parallelable configuration and extended backup time with external battery cabinets.

Features



Best in Class Efficiency

- Supports parallel operation up to 4 units N+X configuration
- Backup time can be prolonged through cascaded connection or use of large capacity battery bank
- Outstanding energy-saving performance with more than 92% efficiency
- Input power factor of up to 0.99 with high electric energy utility rate
- Extra-wide input voltage/frequency range effectively reduces the discharging period of battery; thus, prolonging battery life
- Compatible with single-phase and 3-phase input power
- Optional strong charging capability effectively reduces the battery recharging time



Highly Reliable

- Double-conversion online design that ensures continuous power even when the main AC fails
- Supports N+X redundant mode up to 4 units for increased system reliability
- DSP full-digital control with high output voltage precision
- Uses state of the art technology and components to withstand fluctuation of input main voltage
- Provides latest USB monitoring interface
- Optional WEB/SNMP card for remote management
- Available in standard and long backup for 4-8 hours runtime. External charger is also available

The Liebert ITA Series Is Ideally Suited For:

- Small computer rooms requiring long backup time (>30 minutes)
- Branch offices
- Servers
- Network computers and peripherals
- Storage device
- VoIP



Best Total Cost

- 0.9 output power factor and can power 10-30% more load than other ordinary UPS, suitable for latest server models
- Uses soft-wire parallel operation mode without the need for complex parallel subrack, allowing the user to save on system cost
- High system efficiency up to 94%, energy-saving and low operational cost
- High power density allows the rack to have a smaller footprint
- Standard two (2) years warranty

Efficiency and Flexibility from the Liebert ITA UPS Family

The Liebert ITA UPS family from Emerson Network Power provides a truly modular, highly efficient and best-in-class power protection solution for your network. Featuring true on-line double conversion technology and extended runtime across all models, the Liebert ITA is parallelable for maximum flexibility.

- 5kVA to 20kVA
- 30kVA to 150kVA

Liebert ITA Series Technical Specifications

	5kVA		10kVA		16kVA	20kVA
Model	Standard	Long Backup	Standard	Long Backup	Long Backup	Long Backup
Part number	01200311	01200344	01200775	01200770	01200758	01200782
Input parameters						
Rectifier type	IGBT					
Rate Voltage	230/400Vac		230/400Vac		400Vac	
	single-phase, 3-wire or 3-phase, 4-wire system				3-phase, 4-wire system	
Input voltage range	single-phase, 120 Vac~276Vac		single-phase, 120 Vac~288Vac		3-phase, 228 Vac~478Vac	
Input frequency range	45Hz ~ 55Hz		45Hz ~ 65Hz		45Hz ~ 55Hz	
Input power factor	Single-phase ≥ 0.99 / 3-phase ≥ 0.95				Full Load > 0.99	
Battery						
Battery Type	Sealed, non-spillage, maintenance-free lead-acid battery					
Charging capability	<3hrs for recharging to 90% capacity (standard mode)		<6hrs for recharging to 90% capacity (standard mode)		4.5kW, maximum charging power	
Runtime @ pf 0.9 with 1 battery cabinet	Standard battery cabinet: ≤ 5 minutes (5/10kVA)					
External battery cabinet	02351253 (16 blocks x 12V x 7.2AH)					
Battery module specifications (mm)	435W x 640D x 85H (2U rack height), 50kg					
Output parameters						
Rated power	5kVA/4.5kW or 6kVA/4.5kW (self-configurable)		10kVA/9kW		16kVA/14.4kW	20kVA/18kW
Rated voltage	single-phase, 230Vac				3-phase, 400Vac	
Voltage stability	3%				1%	
Frequency stability	0.25%					
Output voltage THD	<3% for linear load, <5% for non-linear load				<2% for linear load, <5% for non-linear load	
Load crest factor	3:1 (comply with IEC 62040-3)					
Step load performance	100%					
Overload capacity performance (% rate load)	125% rated load for 1 min		105% ~ 125% for 5 mins, 125% ~ 150% for 1 min, >150% for 500ms		105% ~ 125% for 5 mins, 125% ~ 150% for 1 min, >150% for 200ms	
System parameters and standard						
Conversion type	On-line Double Conversion					
Parallel Operation	3+1 parallel operation		1+1 parallel operation		3+1 parallel operation	
Form factor	Tower and rack convertible, optional rail kit available					
System efficiency	>92%		>92.5%		Up to 94%	
Transfer time (power failure)	No transfer time, On-line operation					
Noise	<50 dB		<55 dB		≤ 58 dB	
Language	English/Chinese					
Standards/Conformity	IEC/EN62040-1-1					
EMC	IEC/EN 62040-2, IEC/EN61000-3-11, IEC/EN61000-3-12, YD/T1095-2008					
Surge protection	ICE/EN 62040-2, IEC/EN 61000-4-5					
Protection level	IP20					
Dimensions (mm)	435W x 625D x 85H (2U), UPS only		435W x 640D x 85H (2U), UPS only		435W x 750D x 130H (3U), UPS only	
Weight (5g)	17	17.8	20.8	21.5	35	
Warranty	2 Years			1 Year		
Communication and management						
Interface type	USB/Intellislot (Dry Contact/SNMP Card/Modbus Card/RS485 Card)					
Management Software	SiteMonitor					
Environmental parameters						
Operating temperature	0 - 40°C					
Relative humidity	5 ~ 95%, non-condensing					
Altitude above sea level	1500m (refer to GB/T3859.2)				2000m (refer to GB/T3859.2)	

List of battery backup time

ITA 5000VA Runtimes (in minutes)						
Load	4500W	3500W	2500W	1500W	1000W	700W
1 battery cabinets	5.5m	8m	14m	30m	55m	1h20m
2 battery cabinets	17m	24m	40m	1h17m	2h10m	3h15m
3 battery cabinets	30m	40m	1h10m	2h10m	3h20m	4h20m
4 battery cabinets	47m	1h5m	1h38m	3h	4h45m	7h
5 battery cabinets	1h2m	1h29m	2h4m	4h	5h20m	11h30m
6 battery cabinets	1h15m	1h48m	2h43m	4h42m	7h40m	11h30m
7 battery cabinets	1h34m	2h7m	3h14m	5h56m	8h57m	13h40m
8 battery cabinets	1h50m	2h31m	3h51m	6h49m	11h	15h5m



ITA 10000VA Runtimes (in minutes)						
Load	9000W	7000W	5000W	3000W	2000W	1400W
2 battery cabinets	5.5m	8m	14m	30m	55m	1h20m
3 battery cabinets	12m	17m	26m	52m	1h30m	2h25m
4 battery cabinets	18m	23m	40m	1h15m	2h50m	3h10m
7 battery cabinets	26m	35m	55m	1h50m	2h55m	4h
8 battery cabinets	35m	50m	1h10m	1h50m	2h50m	4h15m
9 battery cabinets	42m	55m	1h20m	2h15m	3h25m	4h55m
10 battery cabinets	50m	1h7m	1h30m	2h35m	3h55m	5h40m



ITA 16/20kVA Runtimes (in minutes) (Requiring adding battery cabinets in pairs)						
Load	18kW	14.4kW	13.5kW	10.8kW	9kW	7.2kW
2 battery cabinets	<5m	<5m	<5m	<5m	5m	8m
4 battery cabinets	5m	8m	9m	13m	16m	25m
6 battery cabinets	10m	15m	16m	25m	30m	45m
8 battery cabinets	17m	25m	27m	38m	50m	1h
10 battery cabinets	25m	33m	38m	50m	1h	1h30m

Load	5.4kW	4.5kW	3.6kW	3kW	1.8kW	1.5kW
2 battery cabinets	13m	17m	25m	30m	1h	1h25m
4 battery cabinets	38m	50m	1h	1h25m	2h30m	3h
6 battery cabinets	1h	1h25m	1h48m	2h10m	4h	4h53m
8 battery cabinets	1h36m	1h54m	2h30m	3h	5h40m	7h
10 battery cabinets	2h	2h30m	3h10m	4h	7h17m	8h21m





5kVA



10kVA



16/20kVA

Product List

Liebert ITA Series	
Part Number	Description
01200311	Liebert ITA 5KVA/4.5KW UPS 230V/400V standard model
01200343	Liebert ITA 5KVA/4.5KW UPS 230V/400V long backup model
02352301	Single unit PDU for Liebert ITA (8x C13 + 1 x C19), 2U
02351240	1+1 Parallel POD for Liebert ITA 5KVA (8x C13 + 2 x C19), 2U
02351254	3+1 Parallel POD for Liebert ITA 5KVA (16x C13 + 3 x C19), 4U
04118403	1+1 parallel communication cable kit for Liebert ITA 5/10KVA
04118404	2+1 parallel communication cable kit for Liebert ITA 5KVA
04118404	3+1 parallel communication cable kit for Liebert ITA 5KVA
01200775	Liebert ITA 10KVA/9KW UPS 230V/400V standard model
04118404	Liebert ITA 10KVA/9KW UPS 230V/400V long backup model
02352236	1+1 1PH Input Parallel POD for Liebert ITA 10KVA (8x C13 + 4 x C19), 3U
02352237	1+1 3PH input Parallel POD for Liebert ITA 10KVA (4x C13 + 4 x C19), 3U
01200758	Liebert ITA 16KVA/14.4KW UPS 400V long backup model
01200782	Liebert ITA 20KVA/18KW UPS 400V long backup model
02352814	Liebert ITA 16/20KVA Service Bypass Panel, 3U
02352303	Liebert ITA 16/20KVA 1+1 Parallel Service Bypass Panel, 6U
09060271	Bypass feedback block option for ITA 16/20KVA
04118928	Parallel cable kit for ITA 16/20KVA
04118929	LBS cable kit for ITA 16/20KVA

Liebert ITA Options	
Part Number	Description
02351253	External battery cabinet for Liebert ITA, 2U
02351879	10Amp External Battery Charger for Liebert ITA, 2U
02351817	SIC card for SNMP/WEB Management for Liebert ITA
21150652	Adjustable rail kit for Liebert ITA
02351874	Dry Contact Card for Liebert ITA
02350376	MODBUS card for Liebert ITA

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