

# Liebert® ITA

True On-line Double Conversion Parallelable UPS

5kVA ■ 6kVA ■ 10kVA ■ 16kVA ■ 20kVA

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 0.9/0.8 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 92%-94.5% 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 battery recharging time



### Highly Reliable

- Double-conversion online design that ensures continuous power even when the mains 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 to 8 hours runtime. External charger is also available



### Best Total Cost

- 0.9 output power factor and can power 10-30% more load than other ordinary UPS, suitable for latest server models (0.8 output power factor for 6KVA model)
- 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 for 5kVA and 6kVA models; one year warranty for 10, 16 and 20kVA models

## 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



## 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 and 6kVA
- 10kVA
- 16kVA and 20kVA



## Technical Specifications

Specifications	5kVA		6kVA		10kVA		16kVA	20kVA
Model	Standard	Long back-up	Standard	Long back-up	Standard	Long back-up	Long back-up	Long back-up
Part Number	01201056	01201057	01200858	01200859	01200610	01200679	770 01200758	01200782
Input parameters								
Rectifier Type	IGBT							
Rate Voltage	230 / 400VAC single-phase, 3-wire or 3-phase, 4-wire system						400VAC 3-phase, 4-wire system	
Input Voltage Range	Single-phase, 120VAC to 276VAC				Single-phase, 120VAC to 288VAC		3-phase, 228VAC to 478VAC	
Input Frequency Range	45Hz to 65Hz				45Hz to 65Hz		45Hz to 70Hz	
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, max 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), Min. Qty Required: ITA 5/6/10kVA - 1pc; ITA 16 / 20kVA - 2pcs							
Battery Dimensions: H x W x D (mm)	85 (2U) x 435 x 640							
Battery Weight (kg)	50							
Output parameters								
Rated Power	5kVA / 4.5kW		6kVA/4.8kW		10kVA / 9kW		16kVA / 14.4kW	20kVA / 18kW
Rated Voltage	Single-phase, 220/230/240VAC						3-phase in / out and 3-phase in / Single-phase out	
Voltage Stability	3%						1%	
Frequency Stability	0.25%							
Output Voltage THD	< 3% linear load, <5% non-linear load						< 2% linear load, <5% non-linear load	
Load Crest Factor	3:1 (compliant with IEC 62040-3)							
Step Load Performance	100%							
Overload Capacity Performance (% rated load)	125% for 1min				105 to 125% for 5min 125 to 150% for 1min > 150% for 500ms		105 to 125% for 5min 125 to 150% for 1min > 150% for 200ms	
System parameters and standard								
Conversion Type	On-line double conversion							
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	< 50dB				< 55dB		≤ 58dB	
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							
Unit Dimensions: H x W x D (mm)	85 (2U) x 435 x 625				85 (2U) x 435 x 640		130 (3U) x 435 x 750	
Net Weight (kg)	17				20.8		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 to 40°C							
Relative Humidity	5 to 95%, non-condensing							
Altitude (m)	1500						2000	

## Runtime (in minutes)

5000 / 6000VA							
Load (# of battery cabinets)	4800W (6kVA only)	4500W	3500W	2500W	1500W	1000W	700W
1	4.2min	5min	8min	14min	30min	55min	1h20m
2	9.2min	11min	16min	28min	60min	1h50m	2h40m
3	20min	24min	34min	52min	1h44m	3h	4h50m
4	30min	36min	46min	1h20m	2h30m	3h50m	6h20m
5	35min	42min	52min	1h30m	2h34m	4h28m	7h6m
6	40min	48min	1h6m	1h44m	3h26m	5h36m	7h38m
7	44min	52min	1h10m	1h50m	3h40m	5h40m	8h
8	58min	1h10m	1h40m	2h20m	3h55m	5h50m	8h30m

Note: Battery cabinet = 02351253

10000VA						
Load (# of battery cabinets)	9000W	7000W	5000W	3000W	2000W	1400W
2	5.5min	8min	14min	30min	55min	1h20m
3	12min	17min	26min	52min	1h30m	2h25m
4	18min	23min	40min	1h15m	1h50m	3h10m
5	21min	26min	45min	1h25m	2h14m	3h33m
6	24min	33min	52min	1h43m	2h48m	3h49m
7	26min	35min	55min	1h50m	2h50m	4h
8	35min	50min	1h10m	1h59m	2h55m	4h15m

Note: Battery cabinet = 02351253



16000VA / 20000VA (Requires adding battery cabinets in pairs)												
Load (# of battery cabinets)	18kW	14.4kW	13.5kW	10.8kW	9kW	7.2kW	5.4kW	4.5kW	3.6kW	3kW	1.8kW	1.5kW
2	< 5min	< 5min	< 5min	< 5min	5min	8min	13min	17min	25min	30min	1h	1h25m
4	5min	8min	9min	13min	16min	25min	38min	50min	1h	1h25m	2h30m	3h
6	10min	15min	16min	25min	30min	45min	1h	1h25m	1h48m	2h10m	4h	4h53m
8	17min	25min	27min	38min	50min	1h	1h36m	1h54m	2h30m	3h	5h40m	7h
10	25min	33min	38min	50min	1h	1h30m	2h	2h30m	3h10m	4h	7h17m	8h21m



5kVA / 6kVA



10kVA



16 / 20kVA

## Product List

Part Number	Description
<b>Liebert ITA 5/6KVA 3x1 or 1x1 (On-Line Double Conversion Parallelable UPS)</b>	
01201056	Liebert ITA 5KVA/4.5KW UPS 230V/400V LCD standard model - no internal battery
01201057	Liebert ITA 5KVA/4.5KW UPS 230V/400V LCD long backup model - no internal battery
01200858	Liebert ITA 6KVA/4.8KW UPS 230V/400V LCD standard model - no internal battery
01200859	Liebert ITA 6KVA/4.8KW UPS 230V/400V LCD long backup model - no internal battery
02352998	Battery Sharing Module for ITA 5/6KVA Long backup model
02352301	Single unit PDU for Liebert ITA (8x C13 + 1 x C19), 2U
02351240	1+1 1PH Parallel POD for Liebert ITA 5/6KVA (8x C13 + 2 x C19), 2U
02351241	3+1 1PH Parallel POD for Liebert ITA 5/6KVA (16x C13 + 3 x C19), 4U
02351254	3+1 3PH Parallel POD for Liebert ITA 5/6KVA (16x C13 + 3 x C19), 4U
04118941	Parallel communication cable kit for Liebert ITA 5/6/10KVA, 2pcs required for 1+1, 3pcs for 2+1, and 3pcs for 3+1
<b>Liebert ITA 10KVA 3x1 or 1x1 (On-Line Double Conversion Parallelable PF0.9 UPS)</b>	
01200610	Liebert ITA 10KVA/9KW UPS 230V/400V LCD standard model - no internal battery
01200679	Liebert ITA 10KVA/9KW UPS 230V/400V LCD long backup model - no internal battery
01200775	Liebert ITA 10KVA/9KW UPS 230V/400V standard model (no battery)
01200770	Liebert ITA 10KVA/9KW UPS 230V/400V long backup model (no battery)
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
02352301	Single unit PDU for Liebert ITA (8x C13 + 1 x C19), 2U
04118941	Parallel communication cable kit for Liebert ITA 5/6/10KVA, 2pcs required for 1+1, 3pcs for 2+1, and 3pcs for 3+1
<b>Liebert ITA 16/20KVA 3x3 or 3x1 (On-Line Double Conversion Parallelable PF0.9 UPS)</b>	
01200758	Liebert ITA 16KVA/14.4KW UPS 400V LCD long backup model - no internal battery
01200782	Liebert ITA 20KVA/18KW UPS 400V LCD long backup model - no internal battery
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, 3pc required
04118928	Parallel cable kit for ITA 16/20KVA, 2pcs required for 1+1, 3pcs for 2+1, and 3pcs for 3+1
04118929	LBS cable kit for ITA 16/20KVA
04116598	Battery connection cable one to multiple for Liebert 16/20KVA

Note: Liebert ITA does not include internal battery

## Liebert ITA Accessories (for all Liebert ITA models)

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
02311646	RDU-SIC card for SNMP/WEB Management w/Environmental and PDU Management
02311720	Temperature/Humidity sensor for RDU-SIC card
02311725	Temperature sensor for RDU-SIC card
02354061	Adjustable rail kit for Liebert ITA
02351874	Dry Contact Card for Liebert ITA
02350376	MODBUS card for Liebert ITA
02351786	RS-RS232 to RS-485 Kit for Liebert ITA

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