

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 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 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



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



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



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 | 01200311 | 01200343 | 01200456 | 01200461 | 01200775 | 01200770 | 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 55Hz | | | | 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 / 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, 220VAC | | | | | | 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 | | | | 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 | < 50dB | | | | < 55dB | | ≤ 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 | | | | | | | |
| 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=U16-07C1

| 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=U16-07C1

| 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 |
|-------------|--|
| 01200580 | Liebert ITA 5kVA / 4.5kW UPS 230V / 400V <i>standard model - no internal battery</i> |
| 01200582 | Liebert ITA 5kVA / 4.5kW UPS 230V / 400V <i>long backup model - no internal battery</i> |
| 01200456 | Liebert ITA 6kVA / 4.8kW UPS 230V / 400V <i>standard model - no internal battery</i> |
| 01200461 | Liebert ITA 6kVA / 4.8kW UPS 230V / 400V <i>long backup model - no internal battery</i> |
| 02351252 | LCD option for Liebert ITA 5kVA |
| 02351549 | LCD option for Liebert ITA 6kVA |
| 02352301 | Single unit PDU for Liebert ITA (8 x C13 + 1 x C19), 2U |
| 02351240 | 1 + 1 1PH Parallel POD for Liebert ITA 5 / 6kVA (8 x C13 + 2 x C19), Support 6kVA N+1 Redundancy, 2U |
| 02351241 | 3 + 1 1PH Parallel POD for Liebert ITA 5 / 6kVA (16 x C13 + 3 x C19), Support 18kVA N+1 Redundancy, 4U |
| 02351254 | 3 + 1 3PH Parallel POD for Liebert ITA 5 / 6kVA (16 x C13 + 3 x C19), Support 18kVA N+1 Redundancy, 4U |
| 04118403 | 1 + 1 parallel communication cable kit for Liebert ITA |
| 04118404 | 2 + 1 parallel communication cable kit for Liebert ITA |
| 04118405 | 3 + 1 parallel communication cable kit for Liebert ITA |
| 01200775 | Liebert ITA 10kVA / 9kW UPS 230V / 400V <i>standard model - no internal battery</i> |
| 01200770 | Liebert ITA 10kVA / 9kW UPS 230V / 400V <i>long backup model - no internal battery</i> |
| 02352238 | LCD option for Liebert ITA 10kVA |
| 02352236 | 1 + 1 1PH Input Parallel POD for Liebert ITA 10kVA (8 x C13 + 4 x C19), Support 10kVA N+1 Redundancy, 3U |
| 02352237 | 1 + 1 3PH input Parallel POD for Liebert ITA 10kVA (4 x C13 + 4 x C19), Support 10kVA N+1 Redundancy, 3U |
| 01200758 | Liebert ITA 16kVA / 14.4kW UPS 400V LCD <i>long backup model - no internal battery</i> |
| 01200782 | Liebert ITA 20kVA / 18kW UPS 400V LCD <i>long backup model - no internal battery</i> |
| 02352814 | Liebert ITA 16 / 20kVA Service Bypass Panel, 3U |
| 02352303 | Liebert ITA 16 / 20kVA 1+1 Parallel Service Bypass Panel, Support 20kVA N+1 Redundancy, 6U |
| 09060271 | Bypass feedback block option for ITA 16 / 20kVA, 3 pieces required |
| 04118928 | Parallel cable kit for ITA 16 / 20kVA |
| 04118929 | LBS cable kit for ITA 16 / 20kVA |

Note: Liebert ITA does not include internal battery

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 |
| 02354061 | Adjustable rail kit for Liebert ITA |
| 02351874 | Dry Contact Card for Liebert ITA |
| 02350376 | MODBUS card for Liebert ITA |

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