

# Liebert® ITA2 10 - 40 kVA

Flexible power protection for Rack or Tower installation



## Highlights

**The Liebert ITA2 series is ideally suited for:**

- Small computer rooms
- Integrated solutions
- Branch offices
- Servers
- Network computers and peripherals
- Storage device
- VoIP.

### Product Features:

- **Rack-tower design** for installation flexibility
- Able to deliver both three-phase and single-phase output (10-20 kVA)
- Ultra **high power density**, thanks to 30% reduced dimensions compared to the previous generation
- 0.99 input power factor for **better grid or generator compatibility**
- Unity output power factor for **additional power availability**
- Efficiency in double conversion **up to 96.6%**
- ECO mode operation with efficiency up to 99% and **remarkable energy-saving performance**
- Powerful charging capability for **minimum battery recharging time**.

**The UPS is compatible with any Building Management System (BMS) by offering the following communication features:**

- Voltage-free contact ports
- USB interface
- Vertiv™ IntelliSlot™ for SNMP, Modbus or Relay communication
- Programmable output terminals (10-20 kVA).

## Remarkable Efficiency and Flexibility characterize the Liebert® ITA2 UPS

*Featuring true online double conversion technology, unity power factor and an extremely compact rack-tower design, Liebert ITA2 is the perfect power protection solution for your computer rooms, storage and network equipment.*

### Description

With a unity output power factor, Liebert ITA2 **perfectly matches the needs of modern IT loads**, and with its wide input voltage and frequency range it effectively reduces the need for battery intervention, thus **prolonging battery life**.

It is also endowed with intelligent fans with automatic speed control, which effectively **save energy and reduce noise**.

Liebert ITA2 supports common battery configurations between paralleled UPS and the number of batteries per string, which can be arranged flexibly, facilitating the utilization of different battery systems and **saving on battery investment**.

An extra powerful battery charger across all models capable of recharging high capacity battery strings ensures a **fast charge-restoration** even after a prolonged power outages.

Liebert ITA2 offers **enhanced flexibility** with a wide range of accessories for both stand-alone and rack-mount installations. When rack mounted, it allows to install up to 40 kVA UPS in just 3 U of space, achieving a remarkable space saving. Parallelability and maintenance are facilitated through the use of **dedicated maintenance bypass option** while extended backup time can be provided with **matching battery modules** (10-20 kVA) for a neat rack-mounted installation.

Liebert ITA2 features a multi-lingual LCD user interface allowing close control and monitoring of system status and performance.



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## Technical Specifications

| Ratings (kVA) | 10 | 15 | 20 | 30 | 40 |
|---------------|----|----|----|----|----|
|---------------|----|----|----|----|----|

### Input

|                                                   |                                     |  |                                                                                                            |
|---------------------------------------------------|-------------------------------------|--|------------------------------------------------------------------------------------------------------------|
| Nominal input voltage (V)                         | 380/400/415 (three-phase + neutral) |  | 380/400/415 (Line voltage)                                                                                 |
| Input voltage range without battery discharge (V) | 173 to 498*                         |  | 176 ~ 288, at full load<br>100Vac ~ 176Vac, linear derating<br>100Vac, at half load                        |
| Nominal input frequency (Hz)                      | 50/60                               |  |                                                                                                            |
| Input frequency range (Hz)                        | 40 ~ 70                             |  |                                                                                                            |
| Bypass voltage tolerance (%)                      | selectable from +20 to -40          |  | Upper limit: +10%, +15% or +20%;<br>default: +20%; Lower limit: -10%, -20%,<br>-30% or -40%; default: -40% |
| Bypass frequency tolerance (%)                    | ±20 (±10 selectable)                |  | ±5Hz, ±10Hz                                                                                                |
| Input power factor at full load (kW/kVA)          | 0.99                                |  | ≥0.99, at full load; ≥0.98, at half load                                                                   |
| Current THD at full linear load (THDI%)           | ≤3*                                 |  | <3% (for linear full load)                                                                                 |

### Battery Management

|                                               |        |  |       |  |                                                              |
|-----------------------------------------------|--------|--|-------|--|--------------------------------------------------------------|
| Battery blocks per string                     | 24-40* |  | 32-40 |  | 32-40**                                                      |
| Voltage temperature compensation (mV/°C/Cell) | -3     |  |       |  | default 3 mV/cell/, can be set 0 5mV/<br>cell/ from Paramset |
| Battery charger max. current (A)              | 13     |  |       |  | ≤ 13A                                                        |

### Output

|                                    |                                                                   |    |    |                                                                    |                                                                                        |
|------------------------------------|-------------------------------------------------------------------|----|----|--------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Nominal output voltage (V)         | 380/400/415 (three-phase) or<br>220/230/240 (single-phase)        |    |    | 380/400/415 (three-phase)                                          |                                                                                        |
| Nominal output frequency (Hz)      | 50/60                                                             |    |    |                                                                    |                                                                                        |
| Maximum active power (kW)          | 10                                                                | 15 | 20 | 30                                                                 | 40                                                                                     |
| THDv at full linear load (%)       | ≤2                                                                |    |    |                                                                    | < 2% (linear load);<br>< 5% (non-linear load)                                          |
| Inverter overload capacity at 25°C | 105% for 60 min<br>125% 5 min<br>150% for 1 min<br>> 150%, 200 ms |    |    | 105% for 60 min<br>125% 10 min<br>150% for 1 min<br>> 150%, 200 ms | Up to 105% continuous<br>105%-125% for 10 min<br>125%-150% for 1 min<br>> 150%, 200 ms |

### Efficiency

|                              |             |  |  |       |  |
|------------------------------|-------------|--|--|-------|--|
| Double conversion efficiency | Up to 96.2% |  |  | 96.6% |  |
| ECO Mode Efficiency          | Up to 99%   |  |  | 99%   |  |

### Dimensions and Weight

|                             |                                                                                                                                                                                                 |  |                                                                                            |  |                                                                                                             |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------|
| Dimensions (W x D x H) (mm) | 430 x 500 x 130 (UPS)<br>430 x 500 x 130 (Battery module 3U, 16 x 9 Ah)<br>430 x 650 x 85 (Battery module 2U, 16 x 9 Ah)<br>430 x 500 x 175 (single POD),<br>430 x 500 x 260 (1+1 parallel POD) |  | 430 x 500 x 130 (UPS)<br>430x500x175 (single POD)<br>430 x 500 x 260<br>(1+1 parallel POD) |  | 430 x 590 x 130 (3U) ***<br>430 x 730 x 173 (4U) (single POD)<br>430 x 730 x 261 (6U)<br>(1+1 parallel POD) |
| Net Weight (kg)             | 23 (UPS)<br>51 (Battery module 3U, 16 x 9 Ah)<br>51 (Battery module 2U, 16 x 9 Ah)<br>18 (single POD), 30 (1+1 parallel POD)                                                                    |  | 23 (UPS)<br>18 (single POD)<br>30 (1+1 parallel POD)                                       |  | 30/52 (UPS)<br>20/30 (Single POD)<br>28/43 (1+1 Parallel POD)                                               |

### General

|                                                |                                       |     |  |     |    |
|------------------------------------------------|---------------------------------------|-----|--|-----|----|
| Noise at 1 m (dBA)                             |                                       | ≤58 |  | <60 | 63 |
| Ventilation                                    | Front to back                         |     |  |     |    |
| Maximum altitude                               | 1500 m without derating (max. 3000 m) |     |  |     |    |
| Protection level IEC (60529)                   | IP20                                  |     |  |     |    |
| General and safety requirements for UPS        | EN/IEC/AS/BS 62040-4                  |     |  |     |    |
| EMC requirements for UPS                       | EN/IEC/AS/BS 62040-2                  |     |  |     |    |
| UPS classification according to CEI EN 62040-3 | VFI-SS-111                            |     |  |     |    |
| Enviromental aspects                           | EN/IEC/BS 62040-4                     |     |  |     |    |

\* Conditions apply \*\* 24-26-28-30 with de-rating \*\*\* without junction box (Junction box length is 140mm)