

# UPSI-1208

12 VDC / 8 A

- ✓ 12V DC UPS (Open frame PCB version)
- ✓ Intelligent power sharing
- ✓ Regulated output voltage
- ✓ Min. load disconnect
- ✓ Battery disconnect
- ✓ Power fail timer
- ✓ Battery start function
- ✓ External signal shutdown
- ✓ Battery hot swap
- ✓ Reboot function
- ✓ Fuel gauge



**NEW**



Also available as  
DIN Rail version  
UPSI-1208D

## Technical data

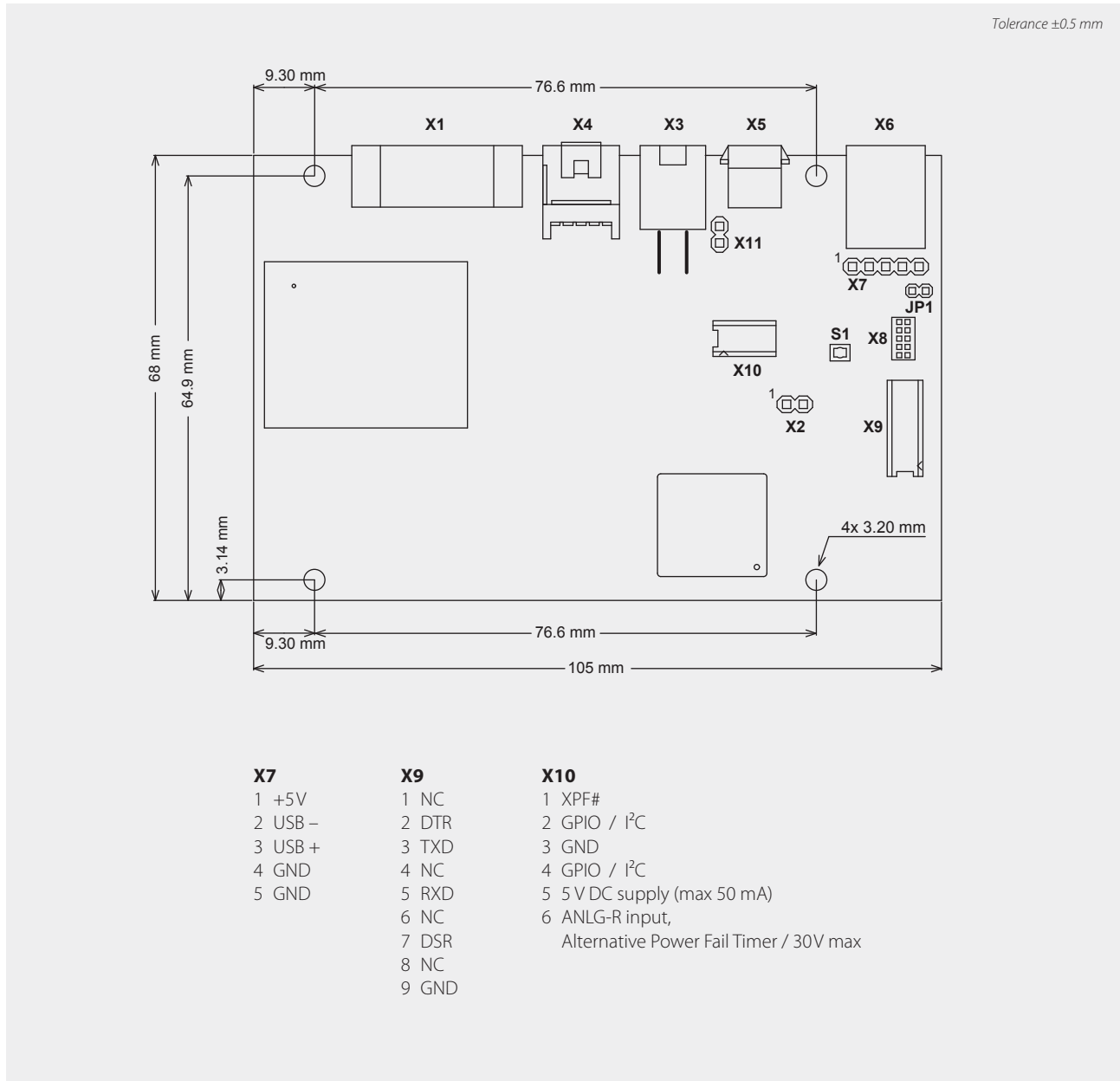
|  |   |
|--|---|
| Input voltage                              | 12 VDC (11.5...16 V)  |
| Input current                              | 9.5 A max.  |
| Output voltage                             | Normal mode: $V_{in} - 0.3V$ (Full load)<br>Backup: 12 VDC  |
| Output current                             | 8 A max.  |
| Capacitive Load                            | 4700 $\mu F$ (12 V Startup)   |
| Battery charge current nom.                | 4 A max. on input   |
| Charging method                            | CC/CV/CP  |
| Protection                                 | Deep discharge protection<br>Overcurrent protection<br>Reverse polarity protection                            |
| Interface                                  | USB, RS232, USB-HID   |
| Type of battery                            | LiFePO4, Supercaps  |
| Temperature                                | Operating: -20...+70 °C / Storage: -20...+70 °C   |
| Max. operation altitude                    | 5000 m  |
| Derating (depending on operation altitude) | 1500 m operation altitude or higher:<br>3.5 W / 500 m or reduction of operation temperature of 3.5 °C / 500 m |
| Humidity                                   | Operating: 10...85 % RH, non-condensing / Storage: 10...90 % RH, non-condensing                               |
| Dimensions (WxDxH)                         | 105 x 68 x 17 mm $\pm 0.5$ mm   |
| Weight (net)                               | 0.09 kg   |

## Product specific data

|                          |   |
|--------------------------|---|
| Battery monitoring       | Battery test is executed in normal mode   |
| Shutdown detection       | Via load sensor   |
| Reboot function          | Reboot function and time can be configured by software  |
| Load sensor              | Configurable via UPSI HID-Battery-Parameter software (download at <a href="http://www.bicker.de">www.bicker.de</a> )<br>UPS shuts down after 15 sec, if connected load decreases below set value and UPS is being in battery mode |
| Timer function           | Configurable via UPSI HID-Battery-Parameter software in steps of single seconds (3600 sec max)  |
| External signal shutdown | UPS can be configured to shut down on external signal (e.g. ignition) with delay set in steps of single seconds (3600 sec max)  |
| Backup time              | See datasheets of battery packs   |
| Relay                    | Dry contact on power fail (Normal mode: open / Backup mode: closed)<br>Relay switching current max 0.5 A @ 125 V AC / 1 A @ 24 VDC  |

As a power component this UPS is for assembly purposes only and must not be operated in unassembled condition. The final assembly has to comply with the valid EMC and safety standards.

Drawing UPSI-1208



Connection

| Connector | Description                                    | Part No.        | Counterpart     |
|-----------|--|-----------------|-----------------|
| X1        | Vin / Vout                                     | WE 691325310004 | WE 691364300004 |
| X2        | LED pin header                                 |                 |                 |
| X3        | Battery pack power                             | WE 64900429522  | WE 649004113322 |
| X4        | I2C and SP to battery pack                     | WE 62400821722  | WE 624008213322 |
| X5        | Relais   | WE 691305140002 | WE 691304130002 |
| X6        | USB  | WE 61400416121  |                 |
| X7        | USB Pin header 2.54 mm                         | WE 61300511121  |                 |
| X8        | JTAG Pin header 1.27 mm                        | WE 62101021021  |                 |
| X9        | RS232  | WE 690367281076 | WE 690157001072 |
| X10       | System info (+5 VDC, PF#, 2x Dig. I/O, ANLG-R) | WE 690367280676 | WE 690157000672 |
| X11       | Pin header – cold start                        |                 |                 |
| S1        | Reset button                                   |                 |                 |
| JP1       | Jumper   | WE 62000211121  | WE 60800213421  |

## Battery packs and Backup time for UPSI-1208

| Nominal backup time, measured at +21 °C |           |          |       |
|---|-----------|----------|-------|
|   | 50 W      | 100 W    | 140 W |
| BP-LFP-1025                             | ~ 25 min  | ~ 12 min | –     |
| BP-SUC-1011                             | ~ 20 sec  | ~ 8 sec  | –     |
| BP-SUC-1020                             | ~ 40 sec  | ~ 16 sec | –     |
| BP-SUC-1033                             | ~ 65 sec  | ~ 30 sec | –     |
| BP-SUC-10066                            | ~ 125 sec | ~ 60 sec | –     |

Back up time depends on battery capacitance, load and temperature.  
 At very high or low temperatures a reduction of backup time occurs.  
 Larger capacities on request.

## P/N explanation battery packs

**BP** – **XXX** – **YYZZ**  
**Battery Pack** LFP = LiFePO4 **YY** Approx. nom. V  
 SUC = Supercaps **ZZ** Capacitance (LiFePO4 in 10<sup>-1</sup> Ah) or useful energy (Supercaps in 10<sup>-1</sup> kJ)

Example:

**BP-LFP-1025**

**BP** Battery Pack

**LFP** Storage medium: LiFePO4

**10** 9.9 V<sub>nom</sub>  
**25** 2.5 Ah

## Scope of delivery

| Quantity | Description  |
|----------|--|
| 1x       | UPSI-1208 - DC UPS                                       |
| 1x       | V <sub>in</sub> / V <sub>out</sub> connector counterpart |
| 1x       | Relay connector counterpart                              |

Specification is subject to change without notice. Errors excepted. Status as at: 19.08.2020