1. **PRODUCT DESCRIPTION**

This sensor board contains a PT1000 temperature sensor and an auto-resettable fuse, which is suitable for charging currents up to 3.5A. The fuse protects the center-tap wire between the battery module and the DC-UPS control unit. The UZS24.100 is compatible with most of the PULS DC-UPS control units and enables all the benefits of the PULS 1-Battery-Concept. This makes the use of matched replacement batteries unnecessary and allows a precise battery charging and testing which results in the longest possible battery life.

2. **FUNCTIONAL DIAGRAM**

![Functional diagram](image)

ORDER NUMBER

**UZS24.100**  Sensor board comprising a PT1000 temperature sensor and an auto-resettable center-tap fuse

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All parameters are specified at 25°C ambient unless otherwise noted.
3. INSTALLATION AND WIRING

The sensor board shall be installed close to the batteries in order for a precise temperature measurement of the batteries.

A Temperature Sensor

Connect pin 11 (Temp.) and pin 12 (RTN) to the corresponding pins on the DC-UPS control unit. The temperature sensor is a PT1000 sensor with SMD technology, which is placed close to the terminal block.

B Center-tap

Connect pin 13 (Center-Tap) to the corresponding pin on the DC-UPS control unit. Connecting the center-tap wire to the DC-UPS control unit enables all the benefits of the PULS 1-Battery-Concept. This makes the use of matched replacement batteries unnecessary and allows a precise battery charging and testing which results in the longest possible battery life. Using the center tap connection is optional. Without this connection, the DC-UPS will function like a traditional UPS system without the above mentioned benefits.

C Battery wire

Connect the blue wire (AWG18, length 0.5m) to the interconnection between the two batteries. Shorten the wire to the required length. Between pin 13 (center-tap) and this wire is an auto-resettable fuse included in order to protect the wire between the sensor board and the DC-UPS control unit. The maximal allowed charging current is 3.5A.
4. TERMINALS

The screw terminals are IP20 Finger safe constructed and suitable for field and factory wiring.

- **Solid wire**: 0.5-1.5mm²
- **Stranded wire**: 0.5-1.5mm²
- **American Wire Gauge**: AWG 20-12
- **Max. wire diameter**: 1.5mm (including ferrules)
- **Wire stripping length**: 6mm / 0.25inch
- **Screwdriver**: 3 x 0.5mm slotted
- **Recommended tightening torque**: 0.5Nm / 4lb-in

5. APPROVALS

**EC Declaration of Conformity**

The CE mark indicates conformance with the
- Low-voltage directive (LVD) 2006/95/EC and
- RoHS directive 2011/65/EU.

6. PHYSICAL DIMENSIONS AND WEIGHT

- **Dimensions**: 110.5 x 23 x 15mm
- **Wire length**: 500mm
- **Weight**: 30g / 0.07lb

![Physical Dimensions](image)

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