



#### SENSOR BOARD FOR BATTERY MODULES

- Suitable for most of the PULS DC-UPS Control Units
- Includes a PT1000 Temperature Sensor
- Includes an Auto-Resettable Fuse for the Center-Tap Connection

### **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.

### **SHORT-FORM DATA**

Size (WxHxD)	110.5x23x15mm
Wire length	500mm
Weight	30g / 0.07lb

### **ORDER NUMBERS**

UZS24.100

Sensor board comprising a PT1000 temperature sensor and an autoresettable center-tap fuse

## MAIN APPROVALS

For details and the complete approval list, see chapter 5





UL 61010-2-201

Class I Div 2

Aug. 2021 / Rev. 1.1 DS-UZS24.100-EN

All parameters are typical values specified at 25°C ambient temperature unless otherwise noted.







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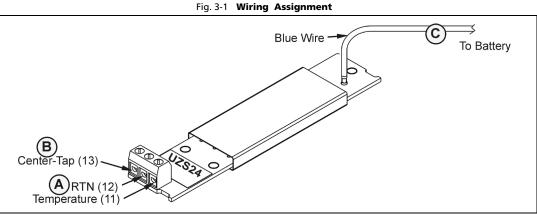
### 1. INTENDED USE

This sensor board is designed for 24V, 20A DC-UPS battery modules. The use of this sensor board is optional. If this device is used in a manner outside of its specification, the protection provided by the device may be impaired.

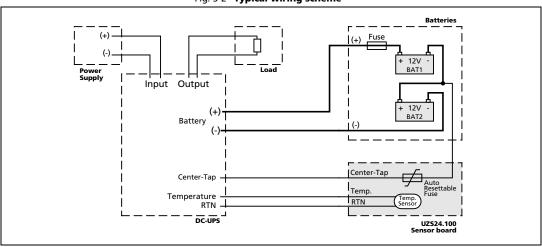
# 2. INSTALLATION AND WIRING

The sensor board shall be installed as close as possible to the batteries in order to measure the precise temperature of the batteries.

- Connect pin 11 and 12 (Temp. Sensor) to the corresponding pins on the DC-UPS control unit. Α
- Connect pin 13 (Tap) to the corresponding pin on the DC-UPS control unit. Using the center tap connection is В optional. Without this connection, the DC-UPS will function like a traditional UPS system without the above mentioned benefits.
- C 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 (Tap) and this wire, is a pre-installed auto-resettable fuse, which is provided to protect the wire between the sensor board and the DC-UPS control unit. The maximal allowed charging current is 3.5A.







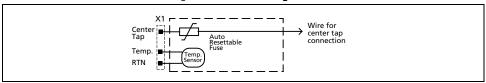
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# 3. FUNCTIONAL DIAGRAM

Fig. 2-1 Functional diagram



# 4. TERMINALS

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

The screw terminals are in 20 miger sure constructed and suitable for held and factory wiring.			
0.5-1.5mm <sup>2</sup>			
0.5-1.5mm <sup>2</sup>			
AWG 20-14			
iameter 1.5mm (including ferrules)			
ripping length 6mm / 0.25inch			
3 x 0.5mm slotted			
nended tightening torque 0.5Nm / 4lb-in			

# 5. APPROVED, FULFILLED OR TESTED STANDARDS

IEC 61010-2-201	CB Report	CB Scheme Certificate Electrical Equipment for Measurement, Control and Laboratory Use - Particular requirements for control equipment
UL 61010-2-201	C UL US LISTED	UL Certificate Listed equipment for category NMTR - Electrical Equipment for Measurement, Control and Laboratory Use - Particular requirements for control equipment Applicable for US and Canada E-File: E198865
Class I Div 2	c ⊕ us	CSA Certificate Power Supplies for Hazardous Location Applicable for Canada and US CSA Class: 5318-01 (Canada), 5318-81 (USA) Temperature Code: T4 Groups: A, B, C and D

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# 6. REGULATORY PRODUCT COMPLIANCE

EU Declaration of Conformity	C€	The CE mark indicates conformance with the - Low-voltage directive - RoHS directive
WEEE Regulation		Manufacturer's Declaration EU Regulation on Waste Electrical and Electronic Equipment Registered as business to business (B2B) products
EAC TR Registration	ERE	EAC Certificate EAC EurAsian Conformity - Registration Russia, Kazakhstan and Belarus 8504408200, 8504409000

# 7. PHYSICAL DIMENSIONS AND WEIGHT

Dimensions 110.5 x 23 x 15mm

Wire length 500mm Weight 30g / 0.07lb

110.5mm 80.8 5.9 Wire length: 500mm

Fig. 7-1 **Physical Dimensions** 

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