

## **User manual**

### **WebSensor T**

### **WebSensor HT**

### **WebSensor COMBO**



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Thank you very much for choosing our product. Please carefully read this user manual as it contains most appropriate ways of dealing with this device, taking into account the basic principles of safety and maintenance. Please also keep the user guide that you can use it during subsequent use.

### **Manufacturer Liability!**

**The manufacturer is not liable for any damage caused by improper or incompatible use of this device, as well for any faults to the device resulting from improper use.**

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## 1 Preliminary information

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**Before using the module please read the user manual carefully and follow the instructions contained within!**

Description of visual symbols used in this user manual:



This symbol is responsible for reviewing the appropriate place in the user instructions, warnings and important information. Failure to follow warnings could cause injury or damage to the module.



Important information and guidelines.



Following this guidelines makes the use of the module easier.

Attention: The appearance of the screen shots shown in this manual may differ slightly from the actual work with the module. The differences may relate to the size and font type and size of symbols. There are no differences in the content of the information.

## 2 The purpose of the device

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WebSemspr T, WebSensor HT and WebSensor COMBO are designed to work with HERO, Nano Temperature Sensor POE, Nano Temp, Depmon and OW Explorer devices.

## 3 Warranty and liability of the manufacturer

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The manufacturer provides a 2-year warranty on the module. The manufacturer also provides post-warranty service for 10 years from the date of the introducing the module on the market. The warranty covers all defects in material and workmanship.

The manufacturer undertakes to comply with the contract of guarantee, if the following conditions are met:

- All repairs, alterations, extensions and device calibrations are performed by the manufacturer or authorized service,
- supply network installation meets applicable standards in this regard,
- device is operated in accordance with the recommendations outlined in this manual,
- device is used as intended.

The manufacturer assumes no responsibility for consequences resulting from improper installation, improper use of the module, not following this manual and the repairs of the module by individuals without permission.



**This device doesn't contain serviceable parts. The repairs can be done only by manufacturers approved repair service.**

## 4 Safety guidelines

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The module has been constructed using modern electronic components, according to the latest trends in the global electronics.

In particular, much emphasis was placed on ensuring optimum safety and reliability of control.

The device has a housing with high quality plastic.

### 4.1 Power supply



Sensors are adapted to 5VDC power supply directly from HERO, Demon Explorer, Nano Temperature Sensor POE, Nano Temp modules.

### 4.2 Storage, working environment and transportation

The controller elements should be stored in closed rooms, in which the atmosphere is free of vapors and caustic agents and:

- ambient temperature from -40 ° C to + 85 ° C,
- humidity 5 to 95%,
- atmospheric pressure 700 to 1060 hPa

The device is designed to work in the following conditions:

- ambient temperature from -25 ° C to + 95 ° C,
- relative humidity of 0% to 95%,
- atmospheric pressure 700 to 1060 hPa.

Recommended transport conditions:

- ambient temperature from -40 ° C to + 85 ° C,
- humidity 5 to 95%,
- atmospheric pressure 700 to 1060 hPa.

### 4.3 Installation and use of the module



**The module should be used following the guidelines shown in next part of the user manual.**

### 4.4 Utilisation of the module

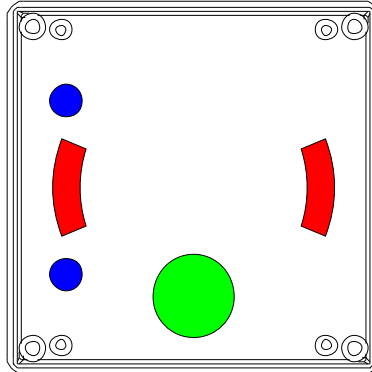
When it becomes necessary to liquidate the device (e.g. after the time of use), please contact the manufacturer or its representative, who are obliged to respond appropriately, e.g. collecting the module from the user. You can also ask the companies involved in utilization and / or liquidation of electrical or computer equipment. Under no circumstances should you place the device along with other garbage.

## 5 Module construction

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### 5.1 Housing

Mounting holes in the housing are designed for mounting the sensors on the wall and in the 19-inch cabinet.



With the green colour marked a hole for the communication/power cable  
The holes for attaching the enclosure to the telecommunications cubicle are marked with blue color.

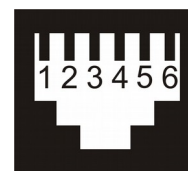
Holes marked red are for mounting on pegs to the wall and for height adjustment.

### 5.2 Connection of sensors

Connection of the bus to the sensor can be made with a 2-wire cable with a maximum cross-section of 1mm<sup>2</sup> or with RJ12 connectors.

#### Description of RJ12 connector pins

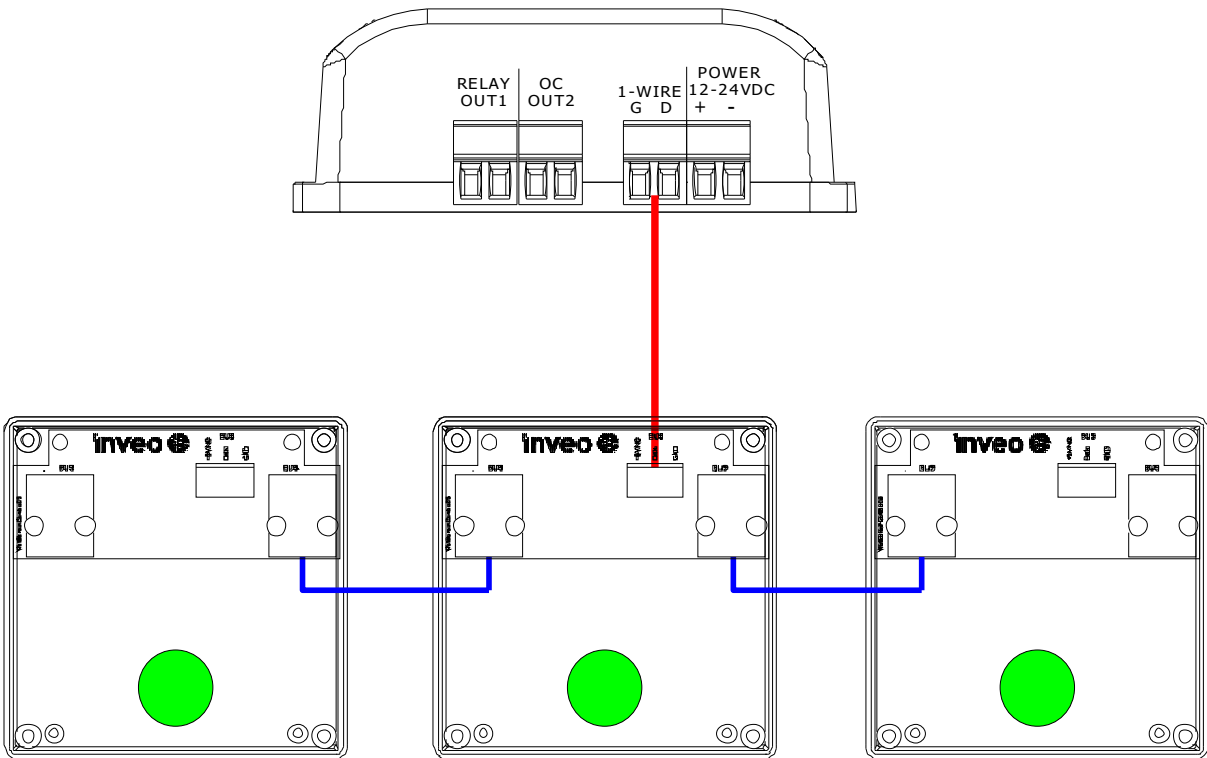
The number of the pin	Name of the pin
1,2	+5V
3,4	Data
5,6	GND



#### Connecting the sensor to the HERO module and the NANO Temperature Sensor:

HERO and Nano Temperature Sensor module	WebSensor-HT
Connector 1-Wire G	GND
Connector 1-Wire D	Data

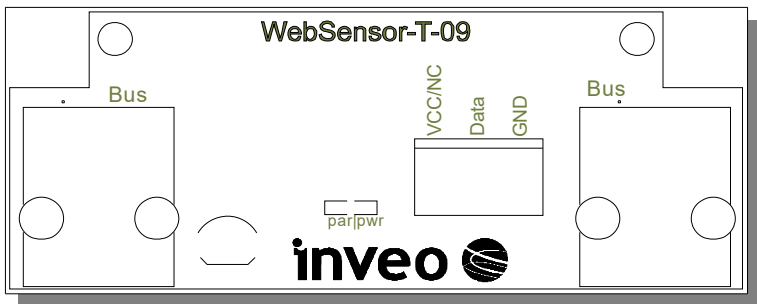
An example of how to connect sensors to the HERO module



**5.3 WebSensor-T**

The WebSensor-T enables measurement of:

- temperature - the sensor is mounted on a PCB



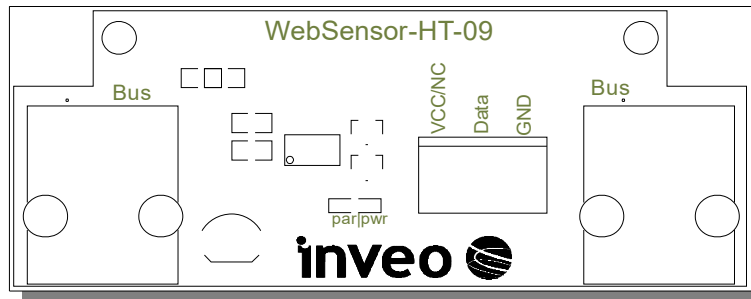
Applied sensor: DS18B20  
 Range of measured temperatures: -55°C do +125°C  
 Accuracy: ± 0.5 ° C in the temperature range -10°C to +85°C  
 Accuracy: ± 2 ° C in the temperature range -55°C to +125°C



## 5.4 WebSensor-HT

The WebSensor-HT allows to measure:

- temperature - the sensor is mounted on a PCB
- relative humidity - a sensor mounted on a PCB



Applied temperature sensor: DS18B20

Range of measured temperatures: -55°C do +125°C

Accuracy:  $\pm 0.5$  ° C in the temperature range -10°C to +85°C

Accuracy:  $\pm 2$  ° C in the temperature range -55°C to +125°C

Applied humidity sensor: HIH5031

Range of measured humidity: 0÷100% RH

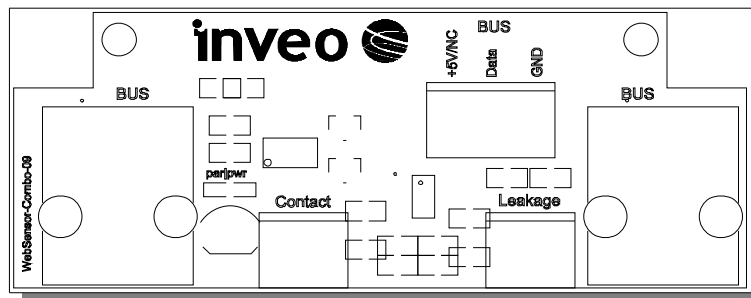
Accuracy:  $\pm 3\%$

Operating range: -40÷85°C

## 5.5 WebSensor-COMBO

The WebSensor-Combo allows to measure:

- temperature - the sensor is mounted on a PCB
- relative humidity - a sensor mounted on a PCB
- digital input CONTACT - it is possible to connect eg a door opening sensor
- digital input LEAKAGE - it is possible to connect a flood sensor



**Temperature:**

Applied temperature sensor: DS18B20

Range of measured temperatures: -55°C do +125°C

Accuracy:  $\pm 0.5$  ° C in the temperature range -10°C to +85°C

Accuracy:  $\pm 2$  ° C in the temperature range -55°C to +125°C

**Humidity:**

Applied humidity sensor: HIH5031

Range of measured humidity: 0÷100% RH

Accuracy:  $\pm 3\%$

Operating range: -40÷85°C

