



## **TDS12251 Temperature sensor with cable (underfloor-outdoor)**

The TDS12251 temperature sensor is suitable for underfloor or outdoor temperature measurement.

As an underfloor sensor it can be used to measure the temperature of the floor and to control the heating/cooling system.

The sensor signal can also be used to visualise the measured temperature on displays, mobile devices, PC, etc...

The TDS12251 needs to be connected with a TELETASK analog input (on DOMUS, TDS12311, TDS12310).

### **APPLICATION**

Floor/outdoor temperature measurement.

### **CHARACTERISTICS**

#### **Housing + sensor probe on cable**

The set exists out of a compact plastic housing with a wired temperature sensor probe with 2 meter cable (to be cut off at the desired length). The sensor probe is sealed watertight and can be used both indoor and outdoor.

### **SETTINGS**

#### **Configuration**

Temperature sensor TDS12251 can be selected in PROSOFT Suite 3.4.12.0 or higher.

### **INSTALLATION**

#### **Housing**

The housing can be installed in a standard wall box with a standard cover plate, near the position of the sensor probe.

#### **Sensor probe**

The sensor probe (Ø8mm) can be inserted in a standard tube (Ø18mm or larger) to position it on the desired spot.  
Max. length of the cable: 2m.

#### Underfloor temperature measurement:

Place the sensor probe in the middle between two tubes of the floor heating/cooling for correct measurement.

#### Outdoor temperature measurement:

As an outside sensor it can be mounted through an opening in the wall via a tube.

Tip: Seal the tube from the inside of the house to prevent incorrect measurement.

! Remark: The position of the tip of the sensor probe must be at least 20mm away from the wall to ensure correct measurement.

! Remark: The sensor probe must be protected from direct sunlight and rainfall, snow and ice (a small enclosure box is recommended).

! Remark: It is not allowed to be submerged in water

! Remark: Make sure that the sealing between the cable and probe, is intact. Do not bend the cable at this point as it will damage the sealing.

#### **Min. supply voltage**

12V (supplied by the TELETASK analog input interface); Min. 9V.

### **CONNECTIONS**

#### **Inputs (from sensor probe)**

Spring pressure connector 3x 0,5-1,5mm<sup>2</sup> (AWG 20-16) (red / black / signal).

### **Outputs**

Spring pressure connector 3x 0,5-1,5mm<sup>2</sup> (AWG 20-16) (+12V / C(=0V) / Out)

To be connected with an analog input interface (e.g.: TDS12311).

Use a shielded cable, to be connected to earth at the analog input interface. Only one sensor per cable or per shielding.

### **POWER CONSUMPTION**

Max. 4 mA

### **DIMENSIONS**

#### **Housing**

42 W x 42 H x 22 D (mm)

#### **Sensor probe**

Ø 8 (mm)

#### **Sensor cable**

Ø 4,5 (mm) x 2m

### **NET | GROSS WEIGHT**

0,115kg | 0,175kg

### **PACKAGING CONTENT**

TDS12251 interface (housing + sensor probe on a cable).

### **STORAGE**

#### **Temperature**

-20°C to +65°C

#### **Relative humidity**

15% to 85%

### **IP PROTECTION RATE**

#### **Housing**

IP20

#### **Sensor probe**

IP67

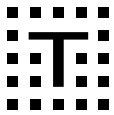
### **OPERATING RANGE**

#### **Temperature**

Housing: 0°C to +50°C max.  
Sensor probe: -40°C to +80°C max.

#### **Relative humidity**

Housing: 5% to 80% at 25°C (non-condensing ambient)  
Sensor probe: 0% to 100%



**SCHEMATIC DRAWING**

**TDS12251**

