

**ORDER-CODES:** 

KESAN1, KESAN2

DATASHEET EXTERNAL TEMPERATURE SENSOR, Quick Start Guide

### **Overview**

The temperature sensor, with active current and voltage output, is used to measure the temperature in outdoor areas or damp/cold rooms. For this purpose, 4 selectable temperature ranges (- $50^{\circ}$ C...+ $50^{\circ}$ C;  $0^{\circ}$ C...+ $50^{\circ}$ C;  $0^{\circ}$ C...+ $100^{\circ}$ C;  $0^{\circ}$ C...+ $160^{\circ}$ C) are available. The connection is made to the expansion module (Ethernet) ORDER-CODE: KIO7017 with analog inputs.

# **Safety instructions**

#### Installation

Installation and commissioning may only be carried out by trained specialist personnel in accordance with the instructions.



No modifications of any kind, other than those described in an appropriate manual, are permitted to Kentix GmbH products.

Certain levels of protection must be provided when installing Kentix equipment.

Observe the relevant regulations for installations in the respective environment.

Only operate the products within the defined temperature range.

The instructions should be passed on to the user by the person carrying out the installation.

Kentix accepts no liability for damage to the equipment or components resulting from incorrect installation. No liability is accepted for incorrectly programmed units.

Kentix shall not be liable in the event of malfunctions, damage to property or other damage.

Use of the products, transport and storage

Protect the device during transport, storage and operation from

Protect moisture, dirt and damage.

Battery powered products

Do not use products in potentially explosive atmospheres.

Only operate the products within the defined temperature range.

Installation and battery replacement may only be carried out by trained personnel in accordance with the instructions.

Do not charge, short circuit, open or heat batteries.

When inserting the batteries, pay attention to the correct polarity.

The devices must always be operated with the batteries intended for the product.

When changing batteries, always replace all batteries.

Dispose of old or used batteries properly.

Keep batteries out of the reach of children.

Maintenance

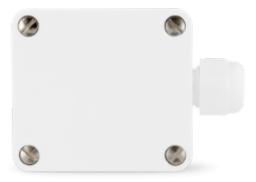
Kentix devices must be checked for functionality as part of annual maintenance.

Disposa

Electrical appliances and batteries must be disposed of separately from household waste.

#### **Controls**

#### **Device view**



TYPE: KESAN1

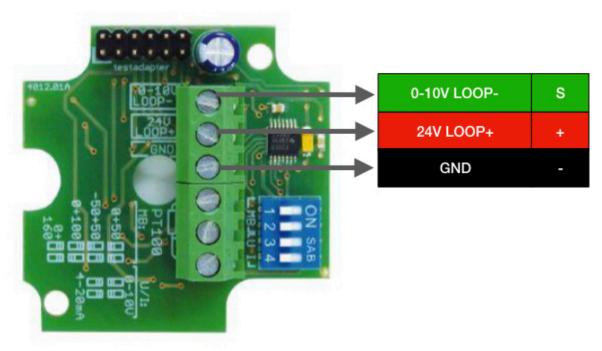




TYPE: KESAN2

Wiring diagram board





Connections and DIP switches with open housing

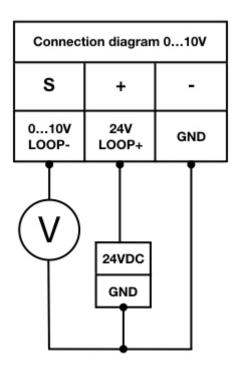
Note the printed DIP switch positions for setting the temperature range:

DIP switch	DIP position	Measuring range
1 + 2	OFF + OFF	0 to +50°C (default)
1 + 2	OFF + ON	-50 to +50°C
1 + 2	ON + OFF	0 to +100°C
1 + 2	ON + ON	0 to +160°C
3 + 4	OFF + OFF	0 - 10V Output voltage (default)
3 + 4	ON + ON	4 - 20mA Output current

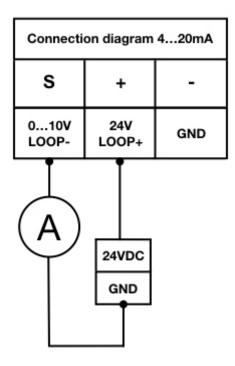
# **Connection diagrams**

Wiring diagram voltage output



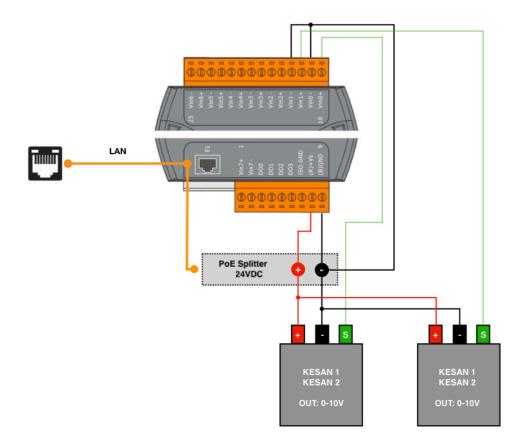


## Wiring diagram current output





# Connection example with 2 temperature sensors (KESAN1 or KESAN2) on extension module KIO7017 with power supply via PoE splitter (24VDC)



The voltage output of the PoE splitter supplies both the KIO7017 module and the two KESAN1/2 sensors with voltage. Note the performance data of the PoE splitter (min. PoE Class 3) and its general operation. We recommend to set 24VDC as output voltage at the PoE splitter if possible.

Note that this is an example of a simple connection variant and other variants are possible. Thus, power supplies, DC/DC converters, etc. can be used instead of the PoE splitter. For further details refer to the wiring options of the expansion module <u>KIO7017</u>. **IMPORTANT!** Electrical engineering expertise is required for the connection and proper installation of the entire system!

## Configuration with KentixONE

The configuration is done via web browser (HTTPS) using the already integrated KentixONE software. Depending on the operating mode (Main or Satellite) of the device, the configuration takes place on the device itself (operating mode: Main), or on a central instance such as the SiteManager or AlarmManager (operating mode: Satellite).



All information about the software is available in the  $\underline{\text{KentixONE}}$  section and the related documentation.

Before you start the configuration, make sure that the software is up to date on all network-enabled Kentix devices. The version status must be the same on all devices.

You can download the latest software here: KentixONE