

**Outdoor sensor Temperature**

Active sensor (0...10 V) for measuring temperature in outdoor areas. Typical applications at cold stores, greenhouses, production plants and warehouses. NEMA 4X / IP65 rated enclosure.


**Type Overview**

Type	Output signal active temperature	Additional features
22UT-12	0...5 V, 0...10 V	External sensor

**Technical data**

<b>Electrical data</b>	Nominal voltage	AC/DC 24 V		
	Nominal voltage range	AC 21.6...26.4 V / DC 13.5...26.4 V		
	Power consumption AC	0.8 VA		
	Power consumption DC	0.4 W		
	Electrical connection	Pluggable spring loaded terminal block max. 2.5 mm <sup>2</sup>		
	Cable entry	Cable gland with strain relief ø6...8 mm		
<b>Functional data</b>	Sensor Technology	Based on Pt1000 1/3 DIN		
	Application	Air		
	Multirange	8 measuring ranges selectable		
	Voltage output	1 x 0...5 V, 0...10 V, min. resistance 5 kΩ		
	Output signal active note	Output 0...5/10 V with Jumper adjustable		
<b>Measuring data</b>	Measured values	Temperature		
	Measuring range temperature	Active sensor: range selectable Attention: max. measuring temperature is restricted by max. fluid temperature (see Safety data)		
		Setting	Range [°C]	Range [°F] Factory setting
		S0	-50...50	-30...130 ✓
		S1	-10...120	40...140
		S2	0...50	40...140
		S3	0...250	30...480
		S4	-15...35	0...100
		S5	0...100	40...240
		S6	-20...80	40...90
		S7	0...160	0...150
	Accuracy temperature active	±0.5°C @ 21°C [±0.9°F @ 70°F] @ measuring range setting S2 and S4		
	Long-term stability	±0.04°C p.a. @ 21°C [±0.07°F p.a. @ 70°F]		
	Time constant τ (63%) in the room	Typical 542 s		
<b>Materials</b>	Cable gland	PA6, white		
	Mounting plate	PC, grey RAL 7001		

<b>Materials</b>	Housing	Cover: PC, white Bottom: PC, white Seal: NBR70, black UV resistant
<b>Safety data</b>	Protection class IEC/EN	III, Protective Extra-Low Voltage (PELV)
	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP65
	Degree of protection NEMA/UL	NEMA 4X
	Enclosure	UL Enclosure Type 4X
	EU Conformity	CE Marking
	Certification IEC/EN	IEC/EN 60730-1
	Quality Standard	ISO 9001
	Type of action	Type 1
	Rated impulse voltage supply	0.8 kV
	Installation method	Independently mounted control
	Pollution degree	3
	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	-35...50°C [-30...122°F]
	Fluid temperature	-35...50°C [-30...122°F]
	Housing surface temperature	Max. 70°C [160°F]

## Safety notes



This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application. Unauthorised modifications are prohibited. The product must not be used in relation with any equipment that in case of a failure may threaten humans, animals or assets.

Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.

The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

## Remarks

### General remarks concerning sensors

When using lengthy connection wires (depending on the cross section used) the measuring result might be falsified due to a voltage drop at the common GND-wire (caused by the voltage current and the line resistance). In this case, 2 GND-wires must be wired to the sensor - one for supply voltage and one for the measuring current.

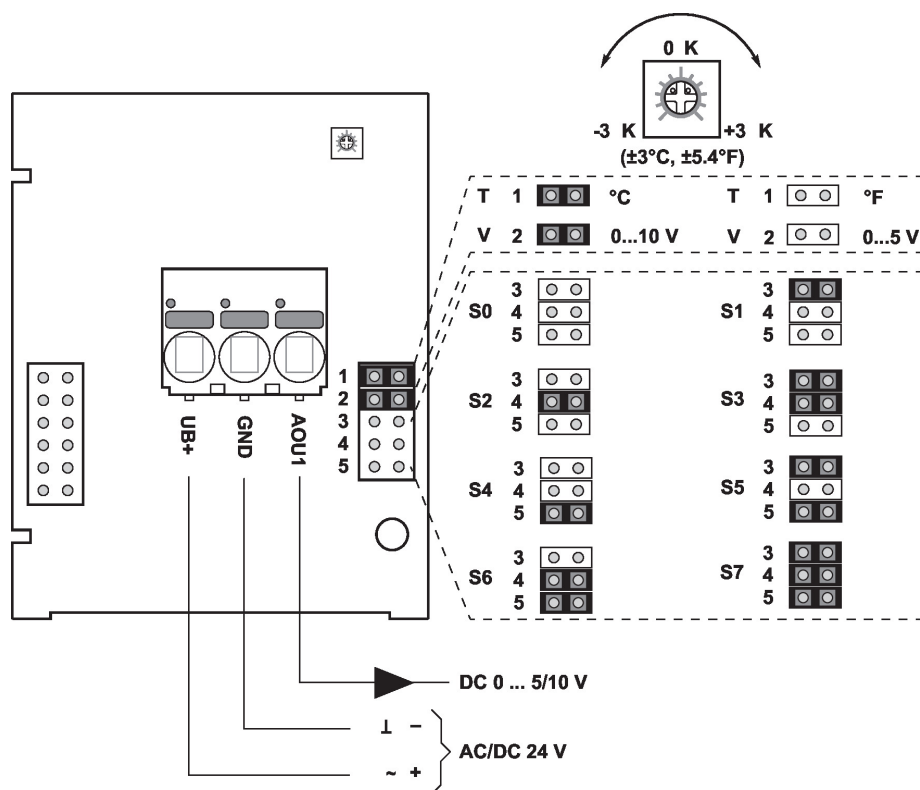
Sensing devices with a transducer should always be operated in the middle of the measuring range to avoid deviations at the measuring end points. The ambient temperature of transducer electronics should be kept constant. The transducers must be operated at a constant supply voltage ( $\pm 0.2$  V). When switching the supply voltage on/off, onsite power surges must be avoided.

## Parts included

Parts included	Description	Type
	Mounting plate S housing	A-22D-A09
	Dowels	
	Screws	

## Accessories

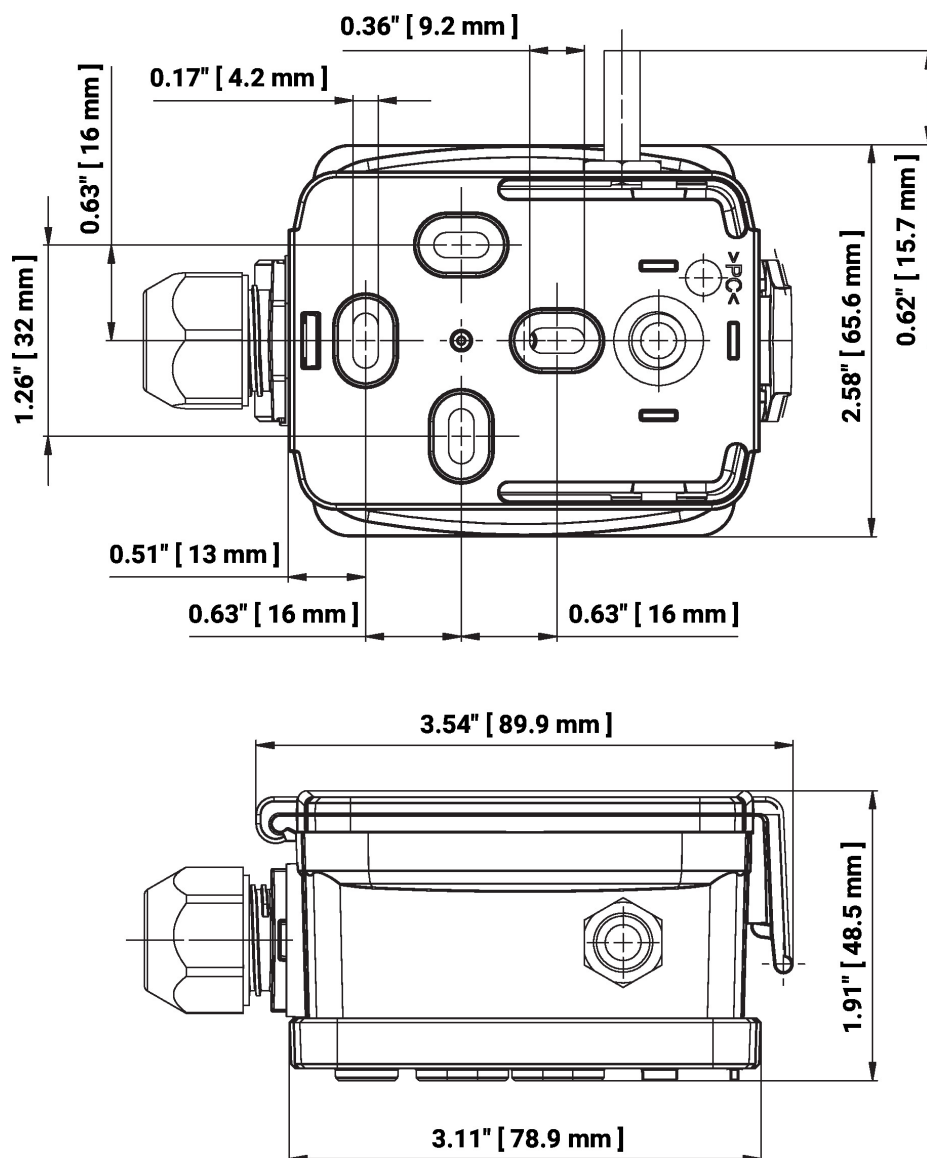
Optional accessories	Description	Type
	Connection adapter flex conduit, M20x1.5, for cable gland 1 x 6 mm, Multipack 10 pcs.	A-22G-A01.1



The adjustment of the measuring ranges is made by changing the bonding jumpers.  
The output value in the new measuring range is available after 2 seconds.

Setting	Range [°C]	Range [°F]	Factory setting
S0	-50...50	-30...130	✓
S1	-10...120	40...140	
S2	0...50	40...140	
S3	0...250	30...480	
S4	-15...35	0...100	
S5	0...100	40...240	
S6	-20...80	40...90	
S7	0...160	0...150	

## Dimensions



Type	Probe length	Weight
22UT-12	25 mm	0.13 kg

## Further documentation

- Installation instructions