

Product data sheet

Weather station "home"



Reference number

2224 WH

KNX weather station "home"

The KNX weather station detects the meteorological data "Wind speed", "Precipitation", "Twilight", "Temperature" and the brightness in three directions. Its main area of application is the automatic, weather-dependent control of shading. It is specially designed for use in homes. To increase functional reliability, the weather station monitors itself in some important functions, and reports any corresponding errors to the bus automatically via indicator objects. It is intended for outdoor installation on a mast or on a wall. The bus coupling to the KNX/EIB is integrated (monoblock). Evaluation of the data themselves, in particular the limiting value processing, is performed already in the weather station. A built-in heater protects against degradation of function from frost and moisture condensation down to $-20\text{ }^{\circ}\text{C}$. The heating system further ensures that the sensor surface of the precipitation sensor will dry off quickly after rain, and also melts snow and ice. Power is supplied to the unit via the bus, except for the heating system and the power supply for the precipitation sensor. The weather station requires an external 24 V AC/DC power supply for the heating system, without which precipitation detection is not possible. Logic gates are available for cascading a number of weather stations and for linking the limiting values and the monitoring functions. Blocking elements make it possible to block individual functions at the installation location.

Intended use

- Measurement and evaluation of weather data: wind speed, precipitation, twilight, temperature and brightness
- Vertical mounting on the outside of buildings, preferably on roofs and at façades

Product characteristics

- Integrated KNX bus coupling unit
- Compact housing
- Low-maintenance device
- Measured-value acquisition and limit value monitoring

The power supply ref.-no.: WSSV 10 is necessary for precipitation detection.

Technical data

KNX medium:	TP 64
Rated voltage KNX:	DC 21 ... 32 V SELV
Power consumption KNX:	typical 450 mW
Connection, KNX:	terminal
External power supply	
Rated voltage:	AC/DC 24 V SELV
Power consumption:	typical 7.5 W
Connection:	connecting terminal yellow/white
Ambient temperature:	$-20\text{ }^{\circ}\text{C}$... $55\text{ }^{\circ}\text{C}$ (free of ice and dirt)
Storing temperature:	$-40\text{ }^{\circ}\text{C}$... $+70\text{ }^{\circ}\text{C}$
Protection level:	IP 44 (in position for use)
Protection class:	III
Dimensions (W x H x D):	approx. 88 x 170 x 204 mm (with assembly arm)

Weight:	approx. 240 g
Sensor signals:	
Temperature sensor	
Measuring range:	-20 ... +55 °C
Accuracy:	± 1 K (for wind speeds > 0.5 m/s)
Wind sensor	
Measuring range:	approx. 0 ... 40 m/s
Accuracy:	± 2 m/s
Precipitation sensor	
Measuring range:	precipitation yes / no
Sensitivity:	fine drizzle
Switch-off delay:	adjustable
Brightness sensor	
Direction:	east, south, west
Measuring range:	approx. 1 ... 110 klx
Spectral range:	approx. 700 ... 1050 nm
Accuracy:	10 % (of measuring range end value)
Dawn sensor	
Direction:	south
Measuring range:	approx. 0 ... 674 lx
Spectral range:	approx. 700 ... 1050 nm
Accuracy:	10 % (of measuring range end value)