Product data sheet

Universal weather station

Reference number
2225 WS U

KNX universal weather station

compact housing
including fastening arm and connection cable
ETS product family: Physical sensors
Product type: Weather station

Intended use

- Measurement and evaluation of weather data: wind speed, wind direction, precipitation, brightness, global radiation, twilight, temperature, relative air humidity and air pressure
- Installation on the outside of buildings, preferable in the roof and facade area
- Operation with additional power supply (ref.-no.: WSSV 10)

Product characteristics

- Integrated GPS/GLONASS receiver for automated positioning
- Calculation of additional weather data: absolute air humidity, chill temperature, comfort
- Function for shading control
- Integrated KNX bus coupling unit
- Measuring and limit value monitoring
- Software logic modules for linking events
- Integrated heating

The weather station needs an operating voltage supply of 24 V AC, for example power supply module ref.-no. WSSV 10.

Spare part:
fastening arm ref.-no.: 2225 BFA

Technical data

Power supply	
Rated voltage:	AC 24 V SELV (± 10 %) DC 21 ... 32 V SELV
Current consumption:	100 ... 400 mA (dependent on the weather)
Protection class:	III
Cable type:	LiYCY 4xAWG26
Cable length:	5 m
Total length per line:	15 m
Number of weather stations:	max. 3 (per line)
KNX medium:	TP 256
Rated voltage KNX:	DC 21 ... 32 V SELV
Current consumption KNX:	max. 5 mA
Ambient temperature:	−30 ... +60 °C
Stora/transport temperature:	−25 ... +70 °C
Degree of protection:	IP 44 (in position for use)

Dimensions (Ø x H):	130 x 68 mm
Wind direction sensor	
Measuring range:	1 ... 360°
Resolution:	1°
Accuracy:	± 10 % (laminar wind stream)
Wind speed sensor	
Measuring range:	approx. 0 ... 40 m/s
Resolution:	0.1 m/s
Accuracy (≤ 10 m/s):	± 1 m/s
Accuracy (> 10 m/s):	± 5 %
Temperature sensor	
Measuring range:	−30 ... +60 °C
Resolution:	0.1 K
Accuracy:	± 1 K (wind > 2 m/s, for −5 ... +25 °C)
Precipitation sensor	
Measuring range:	yes / no
Accuracy:	fine drizzle
Brightness sensors	
Number:	4
Measuring range:	approx. 0 ... 150 klx
Resolution:	1 klx
Accuracy:	± 3 %
Spectral range:	475 ... 650 nm
Dawn sensor	
Measuring range:	approx. 0 ... 900 lx
Resolution:	1 lx
Accuracy:	± 10 lx
Air pressure sensor	
Measuring range:	300 ... 1100 hPa
Resolution:	0.01 hPa
Accuracy:	± 0.5 hPa (20 °C)
Humidity sensor	
Measuring range:	0 ... 100 % relative humidity (r. h.)
Resolution:	0.1 % relative humidity (r. h.)
Accuracy:	± 10 % rel. humidity (20 °C)
Absolute humidity:	0 ... 400 g/m³
Resolution:	0.01 g/m³
Global radiation	
Measuring range:	0 ... 1300 W/m²
Resolution:	1 W/m²
Accuracy:	± 10 %
Spectral range:	350 ... 1100 nm

All accuracy specifications relate to the respective measuring range end value.