

WEATHER STATION

Weather Station Compact WSC11

Part number: 4.9056.xx.00x

The Compact WSC11 weather station is a versatile solution for building automation (BMS) and provides measured values that can be used for everything from room temperature control to fine-tuned monitoring and control of lighting, ventilation and shading systems, such as air conditioning, lamps, heating, windows, awnings, blinds and shutters.

The interface for controlling the device is digital and supports both RS485 (ASCII, Modbus RTU) and KNX (not directly from Thies CLIMA, offered by OEM partners). These interfaces enable smooth communication within a bus network.

In addition to the weather sensors, a GPS receiver is integrated, which allows a variety of parameters to be measured and calculated:

- Wind speed
- Wind direction
- Brightness (north, east, south, west)
- Twilight
- Global radiation
- Precipitation status
- Precipitation intensity (option)
- Precipitation amount (option)
- Ice/frost/snow detection (option)
- Temperature
- Dew point temperature
- Absolute humidity
- relative humidity
- Absolute air pressure
- Air pressure at sea level (QNH)
- Time / date
- Geostationary data
- Longitude
- Latitude
- Position of the sun
- Elevation
- Azimuth

Specification

Part number: 4.9056.xx.00x

Wind speed

Measuring range	0 ... 40 m/s
Accuracy	±1 m/s rms (10 m/s) ±5 % rms (> 10 m/s)



Wind direction

Measuring range	0 ... 360 °
Accuracy	±10 °

Precipitation

Measuring range general	1 / 0 (yes / no)
Accuracy	-

Radiation

Measuring range	0 ... 1300 W/m²
Accuracy	±10 % of meas. range

Temperature

Measuring range	-30 ... +60 °C
Accuracy	±1 K @ -5 ... 25 °C (WS > 2 m/s)

Rel. Humidity

Measuring range	0 ... 100 % rel. h.
Accuracy	±5 % rel. h. (@ 0 ... 20 °C)

Brightness

Measuring range	0 ... 150 kLux
Accuracy	±3 % of meas. range

Twilight

Measuring range	0 ... 500 Lux
Accuracy	±10 % of meas. range

Air pressure

Measuring range	300 ... 1100 hPa
Accuracy	±0.5 hPa @ 20 °C

Data output digital

Interface	RS485 (half duplex)
Baudrate	1200 ... 115200 Baud
Protocol	ASCII (preselected)

Operating voltage

Electronic	18 ... 30 V DC or 18 ... 28 V AC 50 / 60 Hz
Current consumption	120mA @ 24 V (max. 1,5A AC, max 0,5A DC)

General

Time synchronization	GPS
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Ambient temp.	-30 ... +60 °C
Electr. connection	7 pol. Stecker
Mounting	on mast tube Ø 25mm`
Dimension	Ø 130 x 70 mm
Weight	0.2 kg

Versions

As per 4.9056.xx.00x, but:

Product number 4.9056.10.001	
Data output digital	
Protocol	MODBUS RTU (preselected)

Accessories

Product	Product name	Brief description	
	Mounting angle 509564	Serves for the lateral mounting of the Weather Station at a vertical surface.	
		General	
		Material	stainless steel 1.4301
		Dimension	250 x 42 mm
	Cable for WSC 510023	Assembled 7-pole connecting cable for Weather Station Equipment:	
		• cable socket, instrument-site • open ends, receive-site • shielded • lenght: 5 m • with Silicon spout	
		General	
		Cable length	5 m

Cable for WSC 510024	Assembled 7-pole connecting cable for Weather Station Equipment:	
	<ul style="list-style-type: none">• cable socket, instrument-site• open ends, receive-site• shielded• lenght: 10 m• with Silicon spout	
	General	
	Cable length	10 m