

Weather Station Compact WSC11

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/m ²
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
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)

Product number 4.9056.10.000

Data output digital

Protocol Data in ASCIIformat (command interpreter:THIES)

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: <ul style="list-style-type: none"> • cable socket, instrument-site • open ends, receive-site • shielded • length: 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 • length: 10 m • with Silicon spout General Cable length 10 m

