

# WEATHER STATION

## Weather Station Compact WSC11

**Part number: 4.9056.10.000**

The interface for the instrument is digital, and consists of an RS485 interface. Together with the ID-based communication the interface facilitates the operation of the weather station in a bus.

The instrument has a GPS receiver. It serves for the determination of position and time. The sun position is calculated herefrom additionally.

The following parameters can be measured:

- Wind speed
- Wind direction
- Brightness (in North, East, South, West)
- Twilight
- Global radiation
- Precipitation
- Temperature
- Relative air humidity
- Air pressure
- Time / date
- Geostationary data
- Longitude
- Latitude
- Sun position
- Elevation
- Azimuth



## Specification

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### 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	1 / 0 (yes / no)
Accuracy	-

### Radiation

Measuring range	0 ... 1300 W/m <sup>2</sup>
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Accuracy	±10 % of meas. range
<b>Temperature</b>	
Measuring range	-30 ... +60 °C
Accuracy	±1 K @ -5 ... 25 °C (WS > 2 m/s)
<b>Rel. Humidity</b>	
Measuring range	0 ... 100 % rel. h.
Accuracy	±5 % rel. h. (@ 0 ... 20 °C)
<b>Brightness</b>	
Measuring range	0 ... 150 kLux
Accuracy	±3 % of meas. range
<b>Twilight</b>	
Measuring range	0 ... 500 Lux
Accuracy	±10 % of meas. range
<b>Air pressure</b>	
Measuring range	300 ... 1100 hPa
Accuracy	±0.5 hPa @ 20 °C
<b>Data output digital</b>	
Interface	RS485 ( half duplex )
Baudrate	1200 ... 115200 Baud
Protocol	ASCII ( preselected )
<b>Operating voltage</b>	
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)
<b>General</b>	
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 4.9056.10.000, but:

Product number 4.9056.10.001

Data output digital

Protocol	MODBUS RTU ( preselected )
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## Accessories

Product	Product name	Brief description				
	Mounting angle 509564	<p>Serves for the lateral mounting of the Weather Station COMPACT WSC11 at a vertical surface.</p> <hr/> <p><b>General</b></p> <table border="1"> <tr> <td>Material</td> <td>stainless steel 1.4301</td> </tr> <tr> <td>Dimension</td> <td>250 x 42 mm</td> </tr> </table>	Material	stainless steel 1.4301	Dimension	250 x 42 mm
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	Cable for WSC11 510023	<p>Assembled 7-pole connecting cable for Weather Station COMPACT WSC11 Equipment:</p> <ul style="list-style-type: none"> <li>• cable socket, instrument-site</li> <li>• open ends, receive-site</li> <li>• shielded</li> <li>• lenght: 5 m</li> <li>• with Silicon spout</li> </ul> <hr/> <p><b>General</b></p> <table border="1"> <tr> <td>Cable length</td> <td>5 m</td> </tr> </table>	Cable length	5 m		
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	Cable for WSC11 510024	<p>Assembled 7-pole connecting cable for Weather Station COMPACT WSC11 Equipment:</p> <ul style="list-style-type: none"> <li>• cable socket, instrument-site</li> <li>• open ends, receive-site</li> <li>• shielded</li> <li>• lenght: 10 m</li> <li>• with Silicon spout</li> </ul> <hr/> <p><b>General</b></p> <table border="1"> <tr> <td>Cable length</td> <td>10 m</td> </tr> </table>	Cable length	10 m		
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