

Meteorological measuring devices



Sensor

161100 for rain, unheated

161200 for rain, heated



Automatic rain gauge with

- Tipping counter acc. to JOSS-TOGNINI;
- Tipping counter made of high-grade stainless steel;
- Aluminium casing (anodised) with assembly socket for mast;
- **Accessories:** Mast

Technical parameters:

Receiving surface:	200 cm ² (WMO standard)
Resolution:	0.1 mm equiv. to 1 tipping
Tip counting quantity:	2 cm ³
Exit:	REED contact
Operating voltage:	8 ... 29 V DC
Size:	diam. 190 mm, height 395 mm

Sensor

162100 for global radiation

163100 for radiation balance



Sensor for global radiation

Measuring principle:

Determination by means of thermocouples of the radiation-borne excess temperature of a black receiving surface.

Technical parameters:

Measuring range:	0 ... 1400 Wm ⁻²	Time constant:	< 18 s for 95% of end value
Sensitivity:	ca. 10 μV/Wm ⁻²	Spectral region:	0.3 ... 2.8 μm
Error of measurement:	< 2.5%	Temperature range for operation:	-40 °C ... +80 °C



Sensor for radiation balance

Measuring principle:

Measurement of difference between incoming radiation and reflected radiation

Technical parameters:

Measuring range:	-300 ... +1000 Wm ⁻²	Time constant:	< 20s for 90% of end value
Sensitivity:	ca. 10 μV/Wm ⁻²	Temperature range for operation:	-40 °C ... +80 °C
Spectral region:	0,3 ... 60 μm		

Sensor

164100 for wind speed

165100 for wind direction



Sensor for wind speed

Technical parameters:

Measuring tolerance:	1% (+/- 0.1ms ⁻¹)
Linearity:	2%
Response threshold:	0.25 ms ⁻¹
Use temperature: unheated	0 ... +70°C
Use temperature: heated	-30 ... +70°C



Sensor for wind direction

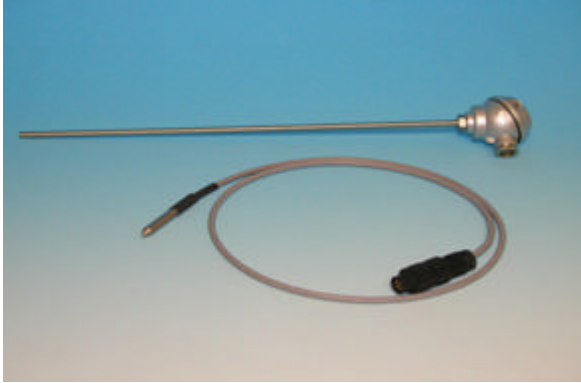
Technical parameters:

Measuring range:	0 ... 355°
Resolution:	0.3°
Response threshold:	0.25 ms ⁻¹
Use temperature: unheated	0 ... +70°C
Use temperature: heated	-30 ... +70°C

Messwertgeber

166100 for soil temperature measurement

167100 for soil surface temperature measurement



Sensor with PT100 (1/3 DIN) for soil temperature measurement, may be buried.
Measuring range: -30C ... +50C.

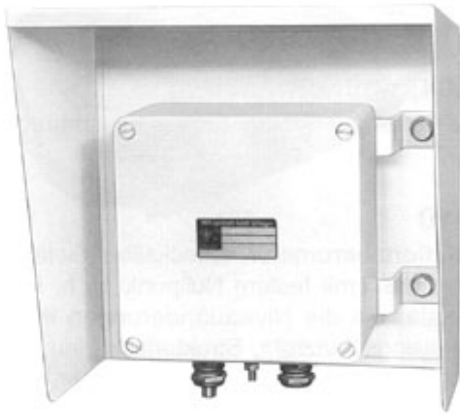


Sensor with PT100 (1/3 DIN) for soil surface temperature measurement with V2A protection against radiation.

Measuring range: -30C ... +50C.

Sensor

168100 for barometric pressure



Sensor for atmospheric pressure recording with aneroid cell as measuring element
Aneroid cell set temperature-compensated
Aluminium die-cast casing (160 mm x 160 mm X 90 mm)

Technical parameters:

Measuring ranges:	945 ... 1055 kPa	915 ... 1025 kPa
	895 ... 1005 kPa	865 ... 995 kPa
Use temperature:	-40 ... +60°C	
Precision:	+/-1.5 kPa	
Output:	0 ... 100 Ohm, linearized	

169100 Combined atmospheric humidity and temperature sensor



Combined atmospheric humidity and Meteorological Station UGT temperature sensor with shelter, type YOUNG.

Technical parameters:

Humidity sensor:

Measuring range: 0 ... 100 % rel. humidity \pm 4 %
Output: 0 ... 1 V
Use temperature: -30 ... +70°C

Air temperature sensor:

Measuring range: -30 ... +70°C \pm 0.1 K
Resolution: 0.1°C
PT 100, 1/3 DIN