

Professional Line	u [sonic] WS7
Identification number.:	00.16480.001000
Wind direction measuring range:	0 ... 359.9 °
Wind speed measuring range:	0 ... 75 m / s
Measuring range air temperature:	-40 ... + 70 ° C
Measuring range rel. Humidity:	0 ... 100%
Measuring range air pressure:	300 ... 1100 mbar
Measuring range global radiation:	0 ... 2000 W / m ² · Global radiation in the range of 285 ... 3000 nm
Accuracy wind direction:	<2 ° (> 1 m / s) RMSE
Accuracy wind speed:	± 0.2 m / s RMSE (v <10 m / s) · ± 2% RMSE (10 <v <65 m / s)
Accuracy air temperature:	± 0.1K (0 ... 60 ° C) · ± 0.2K (-40 ... 0 ° C) > 2 m / s
Accuracy rel. Humidity:	typ. ± 1.5% (0 ... 80%) · ± 2% (> 80%)
Accuracy air pressure:	± 0.5 mbar
Resolution wind direction:	0.1 °
Resolution wind speed:	0.1 m / s
Resolution air temperature:	0.1 ° C
Resolution rel. Humidity:	0.1%
Resolution air pressure:	0.1 mbar
Resolution global radiation:	0.2 W / m ²
Non-linearity:	<± 1% (100 ... 1000 W / m ²)
Response threshold:	0.1 m / s
Output:	RS 485 RS 422 (optional, please specify when ordering: ID no .: 97.16470.000422 configuration RS 422 output)
Protocols:	NMEA 0183 Modbus RTU (optional · please specify when ordering: Ident-No .: 97.16470.000001 configuration Modbus) SDI-12 (optional · please specify when ordering: Ident-No .: 97.16470.000002 configuration SDI-12) other protocols inquiry
Interface:	RS485 / 422 · SDI-12 (optional)
Measuring rate:	0.1 ... 10 Hz
Operating conditions:	-40 ... + 70 ° C (with heating: -50 ... + 70) · 0 ... 100% r. F.
Survival speed:	100 m / s
Supply voltage:	without heating: 6 ... 60 VDC · with heating: 24 V AC / DC ± 20%
Power consumption:	Sensor: typically 50 mA at 24 VDC · with heating: max. 10 A at 24 V AC / DC
Measuring element global radiation:	Thermopile made of high quality thermocouples
Measuring principle global radiation:	Thermoelectric
Heating data:	factory configurable: 60 W / 120 W / 200 W (standard)
Dimensions:	Ø 199 mm · Height 284 mm
Casing:	seawater-proof aluminum
Protection class:	IP 66 · IP 67
Weight:	approx. 3.4 kg
Standards and norms:	Salt spray: EN 60945 · Low voltage standard: 72/23 EEC
EMC standards / electrical safety:	DIN EN 60945 · DIN EN 61000-4-2, 3, 4, 6, 11
Accessories (order separately):	32.16470.060000 sensor cable, 15 m, 8-pin. M16 connector