



V200A-Ultrasonic Wind Sensor, plastic housing and 30W-heater



The ultrasonic wind sensor is designed without mechanical parts as they have been used with traditional „cups and vanes“. The digital or analog output delivers instantaneous, average, min or max value with flexible measuring rate. The V200A-UMB is heated in case reaching critical ambient conditions.

Recommended for:

- meteorology
- building automation

The following outputs/protocols are available:

- NMEA
- ASCII
- UMB
- 4...20mA analog

V200A-Ultrasonic Wind Sensor			Order No.
<i>Extremely precise and maintenance-free measurement of wind velocity and wind direction as well as calculation of acoustic virtual temperature. Belongs to Luffts WS family of professional intelligent sensors with digital and analog interfaces.</i>			
V200A-UMB			8371.UA01
Technical Data	Dimensions	Ø approx. 150 mm, height approx. 200 mm	
	Weight	approx. 0.8 kg	
Wind direction	Principle	Ultrasonic	
	Measuring range	0.1...360°	
	Resolution	0.1° (standard)	
	Accuracy	< 3° RMSE from 1.0 m/s	
	Start-up threshold	0.3 m/s	
	Measuring rate	15 full measurements per second 60 partial measurement	
	Measuring rate instant. value	1-10 s Default 10 s	
Wind speed	Principle	Ultrasonic	
	Measuring range	0...60 m/s	
	Resolution	0.1 m/s	
	Accuracy	± 0.3 m/s or 3% (0...35 m/s) ± 5% (> 35 m/s) RMSE	
	Start-up threshold	0.3 m/s	
	Measuring rate	15 full measurements per second 60 partial measurement	
	Measuring rate instant. value	1-10 s Default 10 s	
Virtual temperature	Unit	m/s; km/h; mph; kts	
	Principle	Ultrasonic	
	Measuring range	-50 °C...+70 °C	
	Resolution	0.1 K	
	Accuracy	± 2.0 K (without heater and without sun exposure)	
	Measuring rate	15 full measurements per second 60 partial measurement	
	Measuring rate instant. value	1-10 s Default 10 s	
	Data output	digital	
	Interface	RS485 semi-/full duplex, isolated	
	Baud rate	1200-57600	
	Measurement rate	instantaneous value 1-10 s	
	Measurement	Avg (arithmetic, vector), Min, Max 1-10 min	
	Status	Heating, sensor failure	
	Data output	Only semi-duplex mode	
	Output signal	4-20 mA (instantaneous, avg, min, max)	
Max. load	max. 300 Ohm		
Resolution	16 bit		
General Information	Permissible ambient temperature	-40...+60 °C (with heating)	
	Bus operation	Up to 32 devices	
	Operating voltage	electronic 10...30 VDC or 24 VDC/1.2 VA	
	With heating	24 VDC, max. 20 VA	
	Electrical connection	8 pole plug	
	Housing material	Plastic	
	Protection type	IP 65	
	Mounting	Pole diameter 50 mm / 2"	
Accessories	Factory certificate	yes	
	Surge protection		8379.USP-V
	Power supply 24 V/4 A		8366.USV1
	UMB interface converter ISOCON		8160.UISO
	Connection cable Ventus/V200A, 15 m incl. connector		8371.UK015
	Connection cable Ventus/V200A, 50 m incl. connector		8371.UK050
Connector Ventus/V200A		8371.UST1	