Lufft V200A-UMB Ultrasonic Wind Sensor

Product #:	8371.UA01
USD Price:	Contact Hach

Extremely precise and maintenance-free measurement of wind speed and wind direction. Extremely precise and maintenance-free measurement of wind velocity and wind direction as well as calculation of acoustic virtual temperature. 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 or building automation. The following outputs/protocols are available: NMEA, ASCII, UMB and 4.. 20 mA analog.

Built-in components
Built-in data pre-processing, universal interfaces and selectable output protocols – compatible with OTT-dataloggers, commercially available HydroMet dataloggers and PLS systems.

Maintenance-free
Maintenance-free operation – no moving parts that can wear out thanks to ultrasonic measuring method; no need for re-calibration.

Versatile
Suitable for all climate zones; also for solar-powered automatic meteorological stations.

Specifications

*Parameters Measured:	Wind Speed
	Wind Direction
	Virtual Temperature
	Barometric Pressure
Accuracy:	Wind Direction: < 3° (> 1 m/s) RMSE
	Wind Speed: ±0.3 m/s or ±3% (0 - 35 m/s) ±5% (>35 m/s) RMS
	Virtual Temperature: ±2.0 °C (without heater and without sun exposure or wind > 4 m/s)
	Air Pressure: ±1.5 hPa
Ambient Temperature:	+25 - +140 °F (-4 - +60 °C) without heating
	-40 - +140°F (-40 - +60°C) with heating
Analog Output:	Yes
Analog Outputs:	4 - 20 mA or 0 - 10 V
Analogue Ouput Signal:	4 - 20 mA or 0 - 10 V or 2 - 2000 Hz

Baud Rate:	1200 - 57600
Bus Operation:	Up to 32 devices
Cable Connection:	8 pole plug
Diameter:	2 in (50 mm)
Dimensions:	Ø approx. 5.9 in (150 mm), H approx. 6.7 in (170 mm)
Factory Certificate:	Yes
Housing Material:	Plastic
Interface:	RS485 semi-/full duplex, isolated
IP Rating:	IP66
Measurement technology:	Ultrasonic
Measuring Range:	Wind Direction: 0 - 359.9 °
	Wind Speed: 0 - 295.3 ft/s (0 - 90 m/s)
	Virtual Temperature: -58 - +158 °F (-50 - +70 °C)
	Air Pressure: 300 - 1200 hPa
Operating Height:	3827 yd (Max) (3500 m)
Operating voltage:	24 VDC ±10 % or 24 VDC/1.2 VA (without heating 12 VDC)
	24 VDC, max. 20 VA / 12 V (with heating)
Product highlights:	Maintenance-free measurement
	Suitable for extreme ambient conditions
	Ice-free operation
	Compatible interfaces
Resolution:	Data output: 16 bit
	Wind Direction: 0.1 °
	Wind Speed: 0.33 ft/s
	Virtual Temperature: 0.2 °F
	Air Pressure: 0.1 hPa
Sample Rate:	Instantaneous: 250 ms; 1-10 s
	Average: 1 - 10 min
System Monitoring & Controls: Local Status Indication:	Heating, sensor failure
Transducer Heater:	No
Weight:	Approx. 1.8 lbs (0.8 kg)
Wind Speed:	0 - 246 ft/s (0 - 75 m/s)