Lufft WS500 Smart Weather Sensor

Product #:   8373.1

USD Price: Contact Hach

The WS500-UMB is a compact all-in-one weather sensor with measurement of temperature, relative humidity, air pressure, wind direction, wind speed. It is part of the WS product family of professional intelligent measuring sensors with a digital interface and an integrated design with ventilated radiation protection for various environmental applications. One external temperature or rain sensor is connectable.

All-in-one housing concept & easy installation

All-in-one housing concept of a compact weather sensor combining several measurement parameters in one housing with only a single cable connection.

Maintenance-free operation

Maintenance free operation as there are no moving parts that can wear out.

Flexible interfaces and telegrams

SDI-12 and RS485 with supported protocols UMB-Binary, UMB-ASCII, Modbus-RTU, Modbus-ASCII, and XDR.

Aspirated radiation shield

Specifications

*Parameters Measured:	Air Temperature
	Relative Humidity
	Air Pressure
	Wind Direction
	Wind Speed
Air Pressure:	Accuracy: ±0.5 hPa (0 - +104 °F) or ±0.5 hPa (0 - +40 °C)
	Measuring range: 300 - 1200 hPa
	Measurement technology: MEMS capacitive
Air Temperature:	Accuracy: ±0.4 °F (-4 - +122 °F) or ±0.2 °C (-20 - +50 °C), otherwise ±0.9 °F (# -22 °F) or ±0.5 °C (# -30 °C)
	Measuring range: -58 - +140 °F (-50 - +60 °C)
	Measurement technology: NTC
	Resolution: 0.1 °C (-20 - +50 °C), otherwise 0.2 °C

Analog Inputs:	1
Cable Connection:	Open wires
Cable Length:	33 ft (10 m)
Communication:	SDI-12 and RS485 with supported protocols
	UMB-Binary, UMB-ASCII, Modbus-RTU, Modbus-ASCII, XDR
Dimensions:	Ø150 x 287 mm
Interface:	RS485 2 wire
	Baud rate: 1200 - 38400 bit/s (Standard: 19200) or SDI-12
IP Rating:	IP66
Material Enclosures:	Plastics (PC)
Operating Humidity:	0 - 100 %
Operating Temperature Range:	-50 - +60 °C
Power Supply:	12 - 24 VDC
Relative Humidity:	Accuracy: ±2 % RH
	Measuring range: 0 - 100 % RH
	Measurement technology: Capacitive
Water Level:	Accuracy: ±0.3 m/s or ±3 % (0 - 35 m/s) ±5 % (#35 m/s) RMS
	Measuring range: 0 - 75 m/s
	Measurement technology: Ultrasonic
Weight:	3.3 lb (# 1.5 kg)
Wind Direction:	Accuracy: # 3° RMSE # 1.0 m/s
	Measuring range: 0 - 359.9 °
	Measurement technology: Ultrasonic