



## Lufft WS601 Smart Weather Sensor

**Product #:** 8376.1  
**USD Price:** Contact Hach

The WS601-UMB is a compact all-in-one weather sensor with measurement of temperature, relative humidity, air pressure, precipitation, wind direction and 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 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.

### Low power consumption

Tipping bucket rain sensors' yields enables low power operation mode.

### Flexible interfaces and telegrams

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

### Aspirated radiation shield

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## Specifications

*Parameters Measured:	Air Temperature
	Relative Humidity
	Precipitation Amount
	Air Pressure
	Wind Direction
Air Pressure:	Wind Speed
	Accuracy: $\pm 0.5$ hPa (0 - +104 °F) or $\pm 0.5$ hPa (0 - +40 °C)
	Measuring range: 300 - 1200 hPa
	Measurement technology: MEMS capacitive
	Accuracy: $\pm 0.4$ °F (-4 - +122 °F) or $\pm 0.2$ °C (-20 - +50 °C), otherwise $\pm 0.9$ °F (# -22 °F) or $\pm 0.5$ °C (# -30 °C)
Air Temperature:	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:	Ø164 x 445 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
Precipitation:	Accuracy: 2.0 %
	Measuring range: 0 - 200 mm/h
	Measurement technology: Rain Gauge Tipping bucket
Relative Humidity:	Accuracy: ±2 % RH
	Measuring range: 0 - 100 % RH
	Measurement technology: Capacitive
Weight:	3.3 lb (# 1.5 kg)
Wind Direction:	Accuracy: # 3° RMSE # 1.0 m/s
	Measuring range: 0 - 359.9 °
	Measurement technology: Ultrasonic
Wind Speed:	Accuracy: ±0.3 m/s or ±3 % (0 - 35 m/s) ±5 % (#35 m/s) RMS
	Measuring range: 0 - 30 m/s
	Measurement technology: Ultrasonic