





Lufft WS600 Smart Weather Sensor

Product #: 8370.1

USD Price: Contact Hach

The WS600-UMB is an all-in-one weather sensor with measurement of temperature, relative humidity, air pressure, precipitation intensity, precipitation type, precipitation quantity, 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.

Maintenance-free operation

Maintenance free operation as there are no moving parts that can wear out. Precipitation is measured with a radar sensor.

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

Precipitation Intensity

Precipitation Type

Precipitation Quantity

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: $0.1 \, ^{\circ}\text{C}$ (-20 - +50 $^{\circ}\text{C}$), otherwise $0.2 \, ^{\circ}\text{C}$

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: \emptyset 150 x 343 mm Interface: RS485 2 wire

Baud rate: 1200 - 38400 bit/s (Standard: 19200) or SDI-12

IP Rating: IP66

Material Enclosures:

Operating Humidity:

Operating Temperature Range:

-50 - +60 °C

Power Supply:

12 - 24 VDC

Precipitation:

Accuracy: 2.0 %

Measuring range: 0 - 200 mm/h

Measurement technology: 24 GHz Radar

Relative Humidity: Accuracy: ±2 % RH

Measuring range: 0 - 100 % RH

Measurement technology: Capacitive

Water Level: Accuracy: $\pm 0.3 \text{ m/s or } \pm 3 \% (0 - 35 \text{ m/s}) \pm 5 \% (#35 \text{ m/s}) \text{ RMS}$

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