

Intelligent Traffic Solutions

Weather Station METEOS 101

ORT/SD-METEOS 101

Ortana Meteorology Station is a professional intelligent measurement transducer with digital interface for environmental applications. This station is especially designed for Traffic Applications with high mechanical strength and low maintenance requirement.

METEOS101 is integrated design with ventilated radiation protection for measuring

- Air temperature
- Relative humidity
- Precipitation intensity
- Precipitation type
- Precipitation quantity
- Air pressure
- Wind direction
- Wind speed



General Information

Interface	: RS485 Semi-Duplex Wire
Weight	: 2 kg
Protection Class	: IP66
Dimensions	: Ø200 / 280 (h) mm
Housing Material	: Polycarbonate & Aluminum
Power Supply	: 24VDC +/- 10% < 5VA (heater is off) 24VDC +/- 10% < 30VA (heater is on)
Temperature Range	: Between -40 °C and 80°C
Accessories	: 10 meters length Connection cable (Included)

Technical Specifications

Temperature

Principle	: NTC
Measuring Range	: -40°C to +80°C or -40°F to +176°F
Accuracy	: ±0,2°C
Unit	: Celsius and Fahrenheit

Relative Humidity (Absolute Humidity, Mixing Ratio, Dew Point, Relative Pressure)

Principle	: Capacitive
Measuring Range	: 0 % RH to 100 % RH
Accuracy	: ±2 % RH
Unit	: g/m ³ (for Absolute Humidity Sensor) , % (for Relative Humidity)

Precipitation Intensity

Principle	: Doppler Radar
Measuring Range	: 0,01mm
Accuracy	: Covers Light Stratiform rain to heavy thunders shower 1 mm/h to 25.4 mm/h
Reproducibility	: typ.>90%
Measuring Types	: Rail, Snow, Hail

Wind Direction

Principle	: Ultrasonic
Measuring Range	: 0° to 359°
Accuracy	: ±3°

Wind Speed

Principle	: Ultrasonic
Measuring Range	: 0m/s to 75m/s
Accuracy	: ±0,3m/s or 3% of measurement, highest value applies
Heating	: 25VA - 30VA at 24VDC

Air Pressure

Principle	: MEMS capacitive
Measuring Range	: Between 300 hPa and 1200hPa
Accuracy	: ±1,5hPa