

MeteOS152, Visibility Distance Sensor measures atmospheric visibility (meteorological optical range) by measuring the amount of light scattered by particles in the air (fog, mist, haze, smoke, dust, rain, and snow).

The integrated solid-state design with a high insulation class performs well in all harsh environmental conditions.

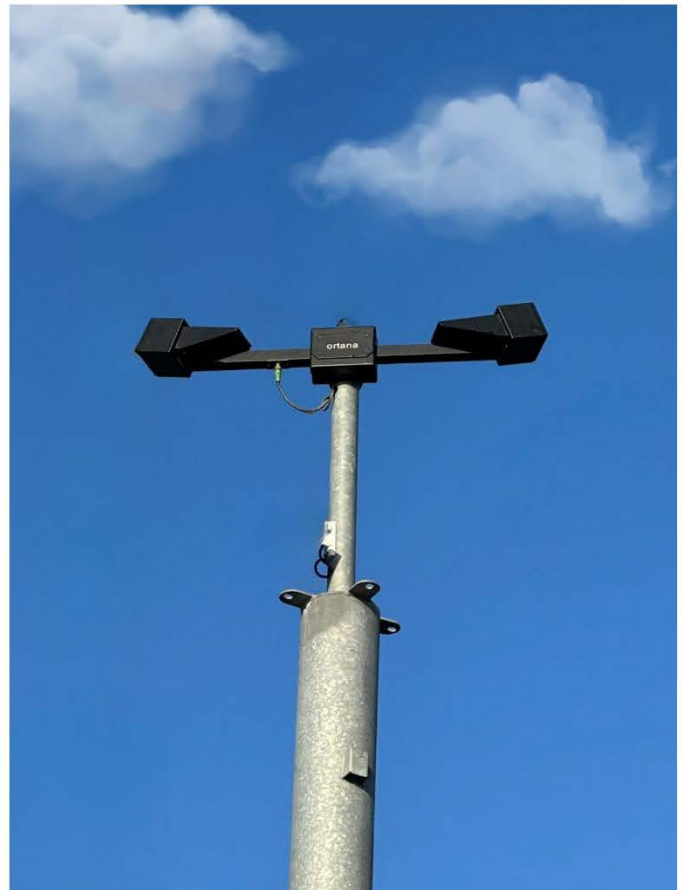


MeteOS152 Specification

- Fully solid-state design.
- Environmental protection class is rated IP66.
- The sensor uses a 21° 'look-down' geometry to reduce optical window contamination.
- The optical windows have continuous duty anti-condensation heaters.
- MeteOS152 measures visibility and/or opacity.
- Aluminum cast mechanical housing.

Advantages

- Special design for transportation applications
- Ideal for collecting long-distance visibility data
- Accurate and monitorable measurement
- High mechanical strength
- Low maintenance requirements and costs
- Compact design
- Easy installation and maintenance
- Integrated solution that supports many different communication protocols (all in one) and does not require different ordering options



Note: The international definition of fog is a visibility of less than 1 km (3,300 ft); mist is a visibility of between 1 km (0.62 mi) and 2 km (1.2 mi) and haze from 2 km (1.2 mi) to 5 km (3.1 mi).

Product Specifications

PERFORMANCE		PHYSICAL	
Visibility Range	0m – 50km	Weight	3650g
Extinction Range (<i>Opacity</i>)	15 – 0.15km ⁻¹	Dimensions	993 (w) x 226 (h) x 208 (d) mm
Accuracy	5 % (0m-1km)	Mounting	60mm or 100mm diameter pipe mount.
	10 % (1km-5km)	Body Material	Aluminum (<i>Ra19005 Black</i>)
	20 % (5km-50km)	POWER	
Time Constant	1 min	DC	24VDC (18-32VDC)
Scatter Angle	42°	Power Consumption	24W (Heater On) 2W (Heater Off)
Source	850 nm LED		

ENVIRONMENTAL	
Temperature	-45°C to +85°C
Humidity	%0 RH to %98 RH
Protection Class	IP66 (EN / IEC 60529)

OUTPUTS	
PORT 1	RS485, UMB Protocol
	RS485, MODBUS over Serial Line
	CANBus (*)
	Diagnostic Relay Output
PORT 2	RS485, NMEA-0183 Protocol
	4-20mA DC
	0-10V DC
	Diagnostic Relay Output
PORT 3	RS485, Service and Calibration
	Diagnostic Relay Output
Alternative output types using the same port can be set in the field using DIP-SWITCHES.	
* Future Option	

ACCESSORIES	
Connection Cable with Connector	10 meter cable with connector included (<i>Pur-Halogen-Free Black (Li9y11y) (8 x 0,25mm²) -AWG24</i>)
Calibration Kit	Optional

STANDARDS		
 EN / IEC 60529	 EN / IEC 61010-1	 EN / IEC 61326-1: 2020