

VIS™ Visibility Sensor VIS-110



OSi's VIS™ (Visibility Sensor) uses exactly the same reliable optical technology employed in OSi's best-selling sensor, the WIVIS® (Weather Identifier & Visibility Sensor), to measure visibility or RVR (Runway Visual Range). The VIS™ is the WIVIS® without present weather (WI: Weather Identifier) capability.

From Antarctica to the tropics and from the US to Australia, users worldwide rely upon OSi sensors. Our instruments can be found working for airports, transportation authorities (such as state DOT's), businesses, municipalities, universities, research institutions, military, and other government agencies. Our customers include the NWS, FAA, MIT, NASA, USAF, and USGS. If your weather measurement needs involve airport observation, roadside weather (RWIS), research, or synoptic observation, OSi's sensors will do the job.

Visibility detection relies on forward scattering, a widely accepted measurement method. Patented OSi technology uses adaptive environmental algorithms to optimize sensor performance in all weather conditions.

The VIS™ has a tough, lightweight frame, that can withstand the rigors of almost any climate. Lens heaters keep the optical path clear of ice during wintry weather. The enclosure is rated NEMA-4 (IP 66). The instrument is easily installed using our U-bolt configuration to a vertical pole or horizontal bar. (No special mounting pole required.) VIS™ reports visibility in either miles or kilometers. The output format is a common ASCII delimited data string, which is easily handled by a PC.

VIS™ Advantages

- **VIS™ = WIVIS® – WI: same advanced optical technology as OSi's premier present weather sensor – VIS™ is WIVIS® w/o present weather**
- **Long-term reliability: operates unattended 24 hours/day, 7 days/week**
- **Low maintenance**
- **Rugged, all-weather design: designed for wide range of conditions**
- **Easy installation: simple U-bolt configuration for horizontal pipe or vertical pole**
- **Self diagnostics & Testing: continuously monitors performance & informs user of trouble**

VIS™ Reports:

Visibility in either English or Metric Units (MOR or RVR)

VIS™ Accessories:

TST-110 Field Test Kit: for testing and calibration.
LDM Limited Distance Modem: for distances > 100 ft. (max = 7 miles).

VIS™ Ordering Information:

Part number: VIS-110-xR

where "x" =

- A for 115 VAC, 50/60 Hz
- B for 230/240 VAC, 50/60 Hz
- C for 100 VAC, 50/60 Hz
- D for 12 VDC
- E for 220 VAC



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OSi's sensors have more than 100 million unit-hours of proven field operation in all weather. MTBF (Mean Time Between Failure) for OSi instruments is ~35,000 hours. The **VIS™** operates unattended 24 hours a day, 7 days a week. The instrument uses proprietary algorithms that eliminate the need for frequent calibration. Field calibration every two years is typical. The **VIS™** has AGC (Automatic Gain Control) to compensate for signal loss. The sensor also employs a comprehensive self-test that updates once per minute and reports any potential problems in the output message. The **VIS™** also contains enhanced EMI protection that allows the instrument to operate in harsh electro-magnetic environments.

No other present weather sensors provide this powerful combination of high technology and proven reliability!

VIS™ Specifications

Performance Specification	
Visibility Dynamic Range	0.001 to 1 mile (Metric units & extended ranges available)
Visibility Accuracy	20%
Measurement Technique	Optical forward scatter

Electronic Specification	
Power Requirements	Factory selectable, 100/115/220/230 VAC, 50/60 Hz @ 50 VA -- 12 VDC optional, 20 VA nominal
Fusing	User-supplied 1.0 A slow blow
Signal Output	RS-232 ASCII
Transient Protection	All power & signal cables protected

Environmental Specification	
Temperature	-40° to 122° F (-40° to 50° C)
Humidity	0-100%
Precipitation / Dust	NEMA 4 type protection

Physical Specification	
Head Size	29 x 4 x 10 inches (737 x 102 x 254 mm)
Head Weight	10 lbs. (4.5 kg)
Enclosure Size	18 x 12 x 9 inches (457 x 305 x 230 mm)
Enclosure Weight	24.2 lbs (11 kg)
Head & Enclosure Cable Length	16.4 ft (5 m)

*Specifications are subject to change without notice



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For the most reliable and best performing present weather instruments, contact OSi today!