

WIVIS™ Weather Identifier Visibility Sensor OWI-130



OSI's **WIVIS™** sensor is the best solution for remote, real-time present weather observation. The **WIVIS™** uses advanced optical technology to measure precipitation rate and identify precipitation type. The **WIVIS™** sensor gives you the added bonus of visibility measurements making it the best present weather detector.

From Antarctica to Saudi Arabia and Switzerland to Australia, our sensors are relied upon world wide. The **WIVIS™** can be found working for universities, state DOTs and municipalities, airports, and many other government agencies. If your needs involve airline safety (in AWOS) systems, road weather, research or synoptic observation, OSI's **WIVIS™** will do the job.

- **Advanced Optical Technology** The **WIVIS™** uses the principle of optical scintillation to measure precipitation. This technology has widespread acceptance from many authorities in both weather and environmental sensing including the NWS, FAA, MIT, NASA, USAF, And USGS.
- **Rugged Design** The **WIVIS™** has a very tough lightweight frame. The frame can withstand the rigors of almost any climate. Lens heaters keep the optical path clear of ice during wintry weather. The instrument enclosure is rated IP66.
- **Easy Installation** The sensor head has a U-bolt mounting configuration that allows you to attach the unit to a vertical pole or horizontal bar.
- **Long-Term Reliability** OSI's present weather sensors have more than 50 million hours of proven field operations in all climates. MTBF (Mean Time Between Failure) of OSI present weather instruments is -35,000 hrs. The **WIVIS™** operates 24 hours a day, 7 days a week.

WIVIS™ Advantages

- **Advanced Optical Technology**
- **Rugged Design**
- **Easy Installation**
- **Long Term Reliability**
- **Reports NWS/WMO Formats**
- **Low Maintenance**
- **Self Diagnostics and Testing**
- **Enhanced EMI Protection**

- **Reports NWS/WMO format** NWS codes are standard and WMO codes are optional.

- **Low Maintenance** The **WIVIS** uses proprietary algorithms that eliminate the need for frequent calibration. Field calibration every two years is typical.

- **Self-Diagnostics and Testing** The sensor has AGC (Automatic Gain Control) to compensate for signal loss. The sensor also employs a comprehensive self-test that updates once a minute and reports any potential problems in the output message.

- **Enhanced EMI Protection** All OSI present weather sensors have enhanced EMI protection that allows them to operate in harsh electromagnetic environments.

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

Accessories:

- HIP-100** Hail and Ice Pellet add-on sensor
- QCS-130** QwikCollect Software for Windows
- TST-130** Field Test Kit
- MZ-0649-00** Limited Distance Modem

Part number: OWI-130-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



Optical Scientific Inc. • 2 Metropolitan Court Suite 6 • Gaithersburg, MD, 20878 • USA
Ph. 301-963 3630 • Fax 301-948-4674 • email: sales@opticalscientific.com
www.opticalscientific.com

WIVIS™ Specifications

PERFORMANCE SPECIFICATION	WIVIS
Present Weather	
Present Weather Codes	More than 50 NWS and WMO (optional) codes
Present Weather Type Identification	Rain, Snow, Drizzle, Mixed, Hail*, Ice Pellets*
Sensor Data Update Rate	Once per minute
Rain	
Rain Dynamic Range	0.1 to 3000 mm/hr
Rain Accumulation	0.001 to 999.999 mm
Rain Accuracy	5% Accumulation
Rain Resolution	0.001 mm
Snow	
Snow Dynamic Range	0.01 to 50 mm/hr water eq.
Snow Accumulation	0.001 to 999.999 mm water eq.
Snow Accuracy	20% Accumulation (depends on snow density)
Snow Resolution	0.001 mm
Visibility	
Visibility Dynamic Range	0.001 to 3 km (10 km optional) 0.001 to 1 mile (7 miles optional)
Visibility Accuracy	20% up to 3 km
Visibility Time Constant	5 minute harmonic
Visibility Contrast Threshold	5%

*With optional HIP-100 Sensor Attachment

ELECTRICAL SPECIFICATION	WIVIS
Power Requirements	110 VAC, 50-60 Hz, 50 VA Others available
Fusing	User Supplied 1.0 A Slow Blow
Signal Output	RS-232 ASCII
Transient Protection	All power and signal lines protected

ENVIRONMENTAL	WIVIS
Temperature	-40° to 50°C (-40° to 122°F) -55° to 55° C (-67° to 131°F) optional
Humidity	0-100%
Precipitation/Dust	NEMA-4 type protection

PHYSICAL	WIVIS
Head Size	740mm W x 118mm H x 250 mm D
Head Weight	4.5 kg
Enclosure Size	305mm W x 465 mm H x 230 mm D
Enclosure Weight	11 kg

*Specifications subject to change without notice.



Optical Scientific Inc. (OSi)
2 Metropolitan Court Suite 6
Gaithersburg, MD 20877
USA
Ph. 301-963-3630
Fax 301-948-4674
website: www.opticalscientific.com
email: sales@opticalscientific.com



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