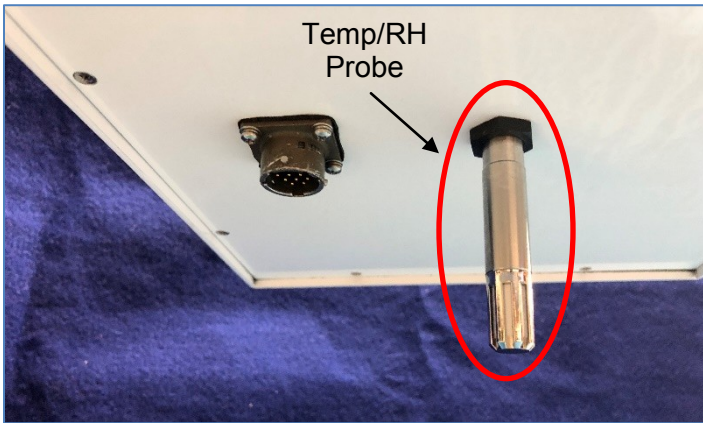
OWI-430-RH DSP WIVIS™ Present Weather and Visibility Sensor

The worlds most advanced present weather and visibility sensor just got better. .Now there is a relative humidity sensor option for the OWI-430. The OWI-430-RH does everything the OWI-430-DS does ***plus*** RH-aided proprietary weather algorithms provide:

- Better discrimination of fog and dust/smoke
- More accurate Haze and Mist Reporting
- Very sensitive precipitation measurements without false positive readings
- Additional relative humidity, dew point, & wet bulb parameters reported



The solid state capacitive relative humidity sensor is easily replaced in the field. Simply: unscrew the cap on the TEMP/RH probe. Pull out the old INTERCAP element. Insert the new element. Screw the cap back on. Finished.

The single enclosure makes integration and installation simple making the sensor ideal for end users and system integrators.

OWI-430-RH™ Advantages

- **Combines RH aided present weather identification, precipitation measurement and visibility into a single rugged package**
- **Advanced scintillation technology Intelligent algorithms based on over 100 million hours of OSi sensor field data**
- **Rugged design – field proven from tropical to sub-arctic environments**
- **Easy Installation and integration Long-term reliability – designed for unattended operation 24/7/365**
- **Reports over 50 NWS / WMO codes Virtually no maintenance required**
- **Built-in self diagnostics & testing Enhanced EMI and surge protection**

Adding the optional HIP-100 acoustic sensor provides for enhanced hail and ice pellet discrimination. The OWI-430 family of sensors is widely used by airports and regional DOT's across the US & throughout the world. No other weather instrument can provide this powerful combination of high performance, low cost and proven reliability!

No other company can provide the proven level of support and customer satisfaction that OSi does!

OWI-430-RH Ordering Information:

- Model no: OWI-430-RH (DC powered, RS-232 serial I/O – specify Metric or ANSI)

Accessories:

- HIP-100 Hail and Ice Pellet add-on sensor
- PSB-430 AC-powered junction box

OWI-430-RH WIVIS^{tm} Specifications

Performance Specification	
Measurement Technique	Scintillation with optical forward scatter and optional acoustic*
Data Reporting Update Rate	1 minute
Present Weather Codes Reported	More than 50 NWS and WMO codes
Present Weather Type Identification	Rain, snow, drizzle, mixed, hail and ice pellets*
Snow / Rain Accumulation	0.001 to 999.999 mm
Snow / Rain Measurement Resolution	0.001 mm
Rain Dynamic Range	0.001 to 3000 mm/hr
Rain Measurement Accuracy	5% accumulation
Snow Dynamic Range	0.001 to 300 mm/hr
Snow Measurement Accuracy	10% accumulation
Hail / Ice Pellet Reporting Accuracy	Correct ID better than 90% of time*
Visibility / RVR Dynamic Range	0.001 to 10+ km (metric and ANSI units available for all ranges) 0.001 to 30+ km (extended range option 1) 0.001 to 50+ km (extended range option 2)
Visibility / RVR Accuracy	10% to 10 km, 15% to 20+ km, 20% to 30+ km
Visibility / RVR Time Constant	3-minute harmonic
Visibility / RVR Contrast Threshold	5%
Ambient Light Dynamic Measurement Range	0 to 9,990 candles / m^2
Relative humidity Measurement Range	0 – 100%
Relative humidity Accuracy @ 23°C	<1%

Electronic Specification	
Power Requirements	11-18 VDC, 3 A nominal (HIP-100 requires 110/220 VAC, 100 VA)*
Transient Protection	All power & signal lines fully protected
Signal Output	RS-232 ASCII, simple polled protocol

Environmental Specification	
Temperature	-40° to 122° F (-40° to 50° C)
Humidity	0 to 100%, Condensing
Wind Speed	125 knots
Icing	0.5” / hr – Heaters protect all optics
Precipitation / Dust	NEMA 4 type protection (Powder-coated aluminum)

Physical Specification	
DSP-WIVIS Sensor Size	35 x 5 x 11 inches (890 x 130 x 280 mm)
DSP-WIVIS Sensor Weight	10 lbs. (4.5 kg)
Cable Length	25 ft. (7.7 meter)
Optional HIP-100 Size	34 x 4 x 9 inches (865 x 90 x 216 mm)
Optional HIP-100 Weight	5 lbs. (2.3 kg)

* References to acoustic / hail and ice particles requires optional HIP-100 Acoustic Hail and Ice Pellet add-on.
Specifications are subject to change without notice.

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For the world’s best performing and most reliable meteorological instruments, please contact OSi today!