

# OWI-430 DSP-WIVIS™

## Visibility and Present Weather Sensor

The OWI-430 DSP-WIVIS™ is the most advanced present weather and visibility sensor ever made. The fully automated instrument provides accurate visibility, present weather and precipitation measurement in a single sensor. This next generation intelligent sensor uses all digital signal processing (DSP) for no-drift high-accuracy results. OSI's patented environmentally adaptive algorithms use artificial-intelligence technology derived from over 100 million field hours of real-world data from our sensors installed around the world. The result is the most advanced weather sensor in the world.

The DSP-WIVIS™ measures visibility and detects and quantifies rain, snow, drizzle, freezing and mixed precipitation conditions. The sensor is designed for year-round continuous operation in all climates from Antarctica to tropical rain forests. OSI's advanced weather sensors provide critical weather information to airport, highway, military, research and meteorological weather information systems all over the world with over 2,000 systems in the field.

The OWI-430 makes use of its DSP electronics to eliminate the need for field calibration. It has built-in self-diagnostics and testing. Accurate visibility measurements are possible over a standard range of 0 ft. to more than 10 miles. Measurements up to 20 miles are available as an option.

### Ordering Information

OWI-430 Visibility and present weather sensor.  
HIP-100 Hail and ice pellet add-on sensor



### Technical Specifications

Measurement Technique:	Scintillation with optical forward scatter and optional acoustic for hail and ice pellets
Present Weather Type ID:	Rain, snow, drizzle, mixed, hail and ice (optional)
Accumulation:	.001 to 999.999 mm (rain & snow)
Measurement Resolution:	.001 mm (rain & snow)
Measurement Accuracy:	rain – 5% accumulation snow – 10 % accumulation
Visibility Range:	0.001 to 10 km (extended ranges available)
Visibility Accuracy:	10% to 5 km, 15% to 10 km
Visibility Time Constant:	3 minute harmonic
Ambient Light:	0 to 9,999 candles / m <sup>2</sup>
Environmental:	-40° to +122°F (-40° to +50°C)
Humidity:	0-100%
Power:	10 - 18 VDC, 3 A nominal HIP requires 110/220/VAC, 100 VA
Output:	RS-232 ASCII
Dimensions:	35" x 5" x 11" (890 x 130 x 280 mm)
Weight:	Sensor – 10 lbs (4.5 kg)