



## Present Weather & Visibility S8841

- Forward-scatter measurement •
- Lightweight, compact design •

This Present Weather Detector sensors use the proven forward-scatter measurement principle to measure Meteorological Optical Range (MOR). The visibility sensor is well-protected against contamination: the optical components point downwards and hoods protect the lenses against precipitation, spray, and dust. The weatherproof design provides accurate measurement results and reduces the need for maintenance.

One set of these models offer a measurement range of 10 to 2,000 meters, a reliable visibility measurement for road weather applications.

The other sets of these models have a measurement range of 10 to 20,000 meters: long-range visibility measurement for diverse applications, including: harbors, coastal areas, heliports, windmill parks, or any location where visibility measurement is necessary.

These sensors are less than one meter long, compact, and lightweight. They can be mounted in many ways on any existing mast.





## Technical Specifications

**S8841**

### Visibility

Operating Principle:	Forward-Scatter Measurement
Measurement Range (MOR):	10 to 2,000 m (32 to 6500 ft)
Measurement Range (MOR):	10 to 20,000 m (32 to 65,600 ft)
Accuracy:	+/- 10%, range 10 to 10,000 m +/- 15%, range 10 to 20 km

### Present Weather

Range 10 to 2,000 m (32 to 6500 ft):

Identifies:	4 different types of precipitation (rain, drizzle, mixed rain/snow, snow), fog, mist, haze (smoke, sand), or clear.
Reports:	39 different codes supported from WMO 4680 code table

Range 10 to 20,000 m (32 to 65,600 ft):

Identifies:	7 different types of precipitation (rain, freezing rain, drizzle, freezing drizzle, mixed rain/snow, snow, ice pellets), fog, mist, haze (smoke, sand), or clear.
Reports:	49 different codes supported from WMO 4680 code table

### Electrical

Power Consumption	3– 6 W (electronics with dew heaters @ 12 VDC)
Options:	2 W (luminance sensor with dew heater)
Outputs:	RS-232, RS-485

### Environmental

Operating Temperature:	-40 to +60°C
Operating Humidity:	0 to 100% RH
Protection Class:	IP66

### **PHYSICAL**

Dimensions:	40.4 cm (w) x 69.5 cm (l) x 19.9 cm (h) 15.91 in (w) x 27.36 in (l) x 7.83 in (h)
Weight:	3 kg (6.61 lb)