

MODEL 5434

RWIS Visibility Sensor

- 16 km Visibility Range
- Flexible Output Options
- Ice-Resistant "Look Down" Geometry
- Simple Installation & Maintenance



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DESCRIPTION:

The Model 5434 RWIS Visibility Sensor measures atmospheric visibility for use in RWIS Environmental Sensor Stations. It is designed to perform in all types of weather conditions. An integrated, one-piece housing keeps all cabling internal to the sensor for ultimate protection against the elements. The sensor housing is made from anodized aluminum and the enclosures are rugged, UV-resistant fiberglass rated to Ip66. Based on the proven experience of the NWS and FAA, the Model 5434 uses a "look down" geometry to reduce window contamination and clogging from blowing snow. The windows use continuous-duty anti-dew heaters. As an option, thermostatically controlled external hood heaters are offered for protection in extreme environments. All power and signal lines to the Model 5434 are protected with surge and EMI filtering to help guarantee uninterrupted service for the life of the sensor.

Installation and maintenance is minimal for the Model 5434. A flange located on the bottom of the sensor signal processing box mates with a user supplied 1-1/2" IPS pipe. Power and signal connections are made through waterproof cable glands to terminal boards in the Signal Processing Box.

Calibration of the Model 5434 in the field is as simple as connecting a factory supplied calibration fixture and following a simple procedure that takes less than 30 minutes. HSE recommends annual calibration.

SPECIFICATIONS:

Temperature	-40° C. to +60° C.
Humidity	0-100%
Protection	IP66 (NEMA 4X)
Range	10m to 16km (other ranges available)
Accuracy	± 10%
Time Constant	60 Seconds
Scatter Angle	42° Nominal
Source	880 nm LED
Outputs	0-10 VDC Standard 0-5 VDC Optional 4-20mA Current Loop Optional Control Relay (2) Optional
Power	
AC Version	100-240 VAC, 14 VA; 70 VA w/Hood Heaters
DC Version	9-18 VDC, 7 VA
Mounting	Nominal 40 mm Pipe, 48.3 mm OD Max
Weight	18 Lbs
Size	35" x 11.5" x 12"
Shipping Weight	25 Lbs

ORDERING GUIDE:

Model 5434-00	RWIS Visibility Sensor
Model 5434-01	Hood Heaters
Model 5431-02	Field Calibration Fixture
Model 5434-03	Signal Cable, 22 AWG, 2-Twisted Pair, Shielded



02-5434-00(A)

Environmental Monitoring Solutions

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