



## FD-330 VISIBILITY SENSOR

The FD-330 Visibility Sensor measures meteorological optical range by determining the amount of light scattered by particles (smoke, dust, haze, fog, rain, and snow) in the air that passes through the optical sample volume. A 42° forward scatter angle is used to ensure performance over a wide range of particle sizes.

The FD-330 uses a "look down" geometry based on proven field experience of the National Weather Service and the FAA to reduce window contamination and clogging from blowing snow.

### Features

- Simple installation and maintenance
- Mounting flange located on the bottom of the main enclosure box mates with a user supplied 1-1/2 inch IPS mounting pipe
- Power and signal cables are installed through waterproof cable glands on the bottom of the main enclosure box to terminal boards for simple but reliable connections
- Integrated Sensor
- High accuracy
- Easy field calibration with factory-supplied calibration fixture (Takes less than 30 minutes)
- Continuous-duty anti-dew heaters on optical windows
- Reduced window contamination and clogging
- Integrated sensor design keeps all sensor cabling internal to the sensor for complete protection against all weather conditions
- Optical windows have continuous-duty, anti-dew heaters; optional thermostatically controlled external hood heaters are available for protection in extreme environments
- Optional hood extensions are available for protection against salt spray and windblown contaminants.
- All power and signal lines to the FD-330 are protected with surge and EMI filtering to help guarantee uninterrupted service for the life of the sensor



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**SPECIFICATIONS**

<b>Dimensions:</b>	889 mm x 292 mm x 305 mm (35" x 11.5" x 12" )
<b>Weight:</b>	8 kg (18 lbs.)
<b>Mounting:</b>	Nominal 40 mm ISO Pipe, 48 mm O.D. Max (1 1/2" IPS Pipe, 1.9" O.D. Max) (Optional) Nominal 25 mm ISO Pipe, 33 mm O.D. Max (1" IPS Pipe, 1.3" O.D. Max)
<b>Power:</b>	
<b>Optional AC Version:</b>	100-240 VAC, 24 VA Nominal; 75 VA with Hood Heaters
<b>DC Version:</b>	10-36 VDC, 6 W Nominal; 18 W with Hood Heaters
<b>Outputs:</b>	
<b>Relays:</b>	1 Control, 1 Diagnostic
<b>Communication:</b>	Serial RS232
<b>Performance:</b>	
<b>Visibility Range:</b>	30m – 16km Standard
<b>Accuracy:</b>	± 10% RMSE
<b>Scatter Angle:</b>	42° Nominal
<b>Source:</b>	880 nm LED
<b>Operating Temperature:</b>	-40°C to + 60 °C
<b>Operating Humidity:</b>	0 – 100%
<b>Corrosion Protection:</b>	NEMA-4X
<b>Ingress Protection:</b>	IP-66

\*Specifications subject to change without notice.

