Visibility and Present Weather Detector w/ Ambient Light

S13642

- **Compact & economical**
- **Measures prevailing visibility accurately**
- **Indicates cause of reduced visibility**
- **Detects precipitation type**

This Visibility and Present Weather Detector provides accurate visibility and present weather measurement where low visibility creates a serious safety hazard. The Visibility and Present Weather Detector also indicates the cause of reduced visibility to give you a full picture of weather conditions.

To produce accurate information, this sensor brings together optical measurement, capacitive precipitation measurement, and sophisticated measurement algorithms and signal analysis. Visibility is measured using the proven forward-scatter technique, and reliable operation is insured in all weather conditions by means of automatic precipitation compensation.

An extensive set of self-diagnostic procedures continuously monitor the status of the sensors. .

The capacitive sensor for detecting precipitation is housed on top of the controller. The visibility sensor is well-protected against contamination: the optical components point downward and hoods protect the lenses against precipitation, spray, and dust.

Technical Specifications

S13642

PERFORMANCE SPECIFICATION – VISIBILITY	
Range	10 m to 20,000 m
Accuracy	+/- 10% to 10,000 M; 15% > 10K
Scatter Angle	43º Nominal
Light Source	Infra-red LED
Output	RS232 or analog
PERFORMANCE SPECIFICATION – PRESENT WEATHER	
Identification	rain, freezing rain, drizzle, freezing drizzle, Mixed rain snow Snow and ice pellets
Reports	WMO METAR and NWS code tables
ENVIRONMENTAL	
Temperature	-40ºC to +60ºC
Humidity	0 to100%
Dimensions	40.4 cm x 69.5 cm x 19.9 cm
Protection	IP66 (NEMA-4X)

Obscurations such as fog, mist and haze are determined more accurately via weather algorithms by using the visibility measurements in conjunction with the input from the other sensors.

AMBIENT LIGHT SENSOR

The background luminance sensor is integrated in the visibility sensor assembly.

TECHNICAL SPECIFICATIONS	
Range	4 to 20,000 cd/m²
Accuracy	10%
Operating Temperature	-40ºC to +60ºC
Humidity	0 to 100% RH