SWS 050 Visibility Sensor



SPECIFICATIONS	
Specifications subject to change without notice	
Visibility measurement	
Measures	Visibility (MOR)
Output	Serial data
Range (visibility)	10m to 40km
Measurement Error	<=10% at 10 km, <=15% at 20 km <=20% at 30 km
Measurement principle	Forward scatter meter with 39° to 51°angle
Outputs and Reports	
Output rate (seconds)	30 to 300 (selectable)
Serial outputs	RS232, RS422 and RS485
Power Requirements	
Sensor power	9-36 VDC
Hood heating power	24 V AC or DC
Basic sensor Window heaters Hood heaters	3.5 W 1.7 W 24 W
Additional features	
Hood heaters	Fitted as standard
Window contamination	Fitted as standard to both sensor head
monitoring	windows
Environmental	
Operating temperature	-40°C to +60°C
Operating humidity	0 - 100% RH
Protection rating	IP65
Physical	
Material	Powder coated aluminium
Weight	3.5 Kg
Length	0.81
Lifetime	>10 Years
Maintenance	
Self-test capability	As standard
User confidence check	6 months recommended
Window cleaning	Automatic compensation andwarnings
Field calibration	With optional calibration kit
Certification & Compliance	
CE certified	
EMC compliance with EN61326-1997, 1998, 2001	
RoHS and WEEE compliant	
	ORDERING
SWS-050	SWS Sensor (delivered in sturdy recyclable foam filled packaging) Includes pole mounting kit (2 x U-bolt & saddles, user manual & calibration certificates
Accessories	Power & data cables
	Mains power adaptor
	Calibration kit
	ALS-2 Ambient Light Sensor
	Hard shell transport case



Monitors visibility and obstruction to vision caused by dust, fog, rain, drizzle, snow and hail. Easy integration with intelligent systems in road and aviation applications.

- ▶ 10m to 40km measurement range
- Compact forward scatter design
- Not affected by local lights
- ▶ Easily installed by one person
- ▶ Hood heating for use in extreme environments
- Easy integration of Biral ALS-2 ambient light sensor
- Comprehensive self-test and maintenance data
- Optimised for applications where accurate & reliable visibility measurements are required.
- Forward scatter measurement principle & unique design ensure output is both accurate & reliable in all weather conditions & will not be influenced by local lights, even those that flash.
- Measurement range of 10m to 40km makes sensor suitable for use in road, meteorological observation & aviation applications
- Constructed from robust aluminium and finished with a high quality powder coat, the sensor will provide years of reliable service.
- ▶ Heating of optical windows & sensor hoods is standard for use in harshest conditions.
- Both optical windows are monitored for contamination
- Visibility output is automatically compensated to reduce maintenance requirements.
- Easy integration of our ambient light sensor makes the SWS-050 perfect for use in aviation applications where both RVR and METAR data is needed.