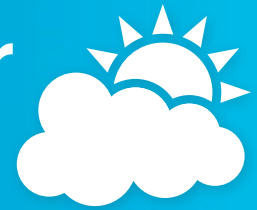


Visibility & Present Weather Sensor SWS 250



SPECIFICATIONS

Specifications subject to change without notice

Visibility & Present Weather Measurements	
Measures	Visibility, present & past weather
Output	Serial data
Range (visibility)	10m to 75km
Measurement Error	≤10% at 10 km, ≤15% at 20 km, ≤20% at 30 km
Measurement principle	Forward scatter meter with 39° to 51° angle
Precipitation detection resolution	Rain: 0.015 mm/hr Snow: 0.0015 mm/hr
Maximum rain rate	250 mm/hr
Rain intensity accuracy	≤ 15%
Outputs & Reports	
Output rate (seconds)	30 to 300 (selectable)
Digital (serial) outputs	RS-232, RS-422, RS-485
WMO Codes	39 from table 4680
METAR Codes	34 present and past weather
Power Requirements	
Sensor power	9-36 VDC
Hood heating power	24 V AC or DC
Basic sensor	3.5 W
Window heaters	2.5 W
Hood heaters	36 W
Environmental	
Operating temperature	-40°C to +60°C
Operating humidity	0 - 100% RH
Physical	
Material	Powder coated aluminium (IP65 protection rating)
Weight	3.3 Kg
Dimensions	811mm (w) x 315mm (h) x 330mm (d)
Maintenance	
Self test functions	with maintenance warnings
User confidence check	6 months (suggested)
Window cleaning	3 months automatic compensation & warnings
Field calibration	With optional calibration kit
Certification & Compliance	
CE certified	RoHS and WEEE compliant
EMC compliance with EN61326-1997, 1998, 2001	
ORDERING	
SWS-250	Visibility & Present Weather Sensor (delivered in sturdy recyclable foam filled packaging w/3m RS232 auxiliary cable, pole mounting kit (U bolt, saddle & bolts), documentation (manual, calibration certificate)
Accessories	Power & data cables. Mains power adaptor. Calibration kit. Hard shell transit case. Post adaptor (for mounting to HA posts)



Measures visibility and identifies a wide range of present and past weather conditions, easy integration with ground based aviation systems in RVR and METAR applications

The sensor measures: visibility (MOR, EXCO and TEXCO), fog, haze, drizzle, snow, hail and other non-frozen precipitation according to WMO 4680. METAR coded outputs are also provided.

For ultimate visibility performance the visual range extends to 75km allowing use in meteorological observation networks and research applications.

- ▶ Present and past weather codes
- ▶ WMO Table 4680 & METAR Outputs
- ▶ Instantaneous and averaged visibility outputs
- ▶ 39 WMO 4680 codes
- ▶ Transmissometer equivalent EXCO output (TEXCO)
- ▶ Easy integration of Biral ALS-2 ambient light sensor
- ▶ Simple field calibration