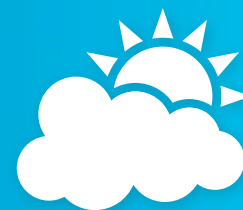


Present Weather Sensor SWS 200



Monitors extended present weather to identify visibility and precipitation. Easily integrated into meteorological networks and data controllers.

- ▶ Selectable measurement range up to 75km
- ▶ Compact forward scatter design
- ▶ Instantaneous and averaged visibility outputs
- ▶ WMO 4680 present weather codes
- ▶ Hood heating for use in extreme environments
- ▶ Digital, analogue and switching relay outputs
- ▶ Comprehensive self-test and maintenance data
- ▶ Precipitation type, intensity & accumulation outputs
- ▶ Date and time stamp on data strings
- ▶ 2 adjustable relays and 1 fault relay
- ▶ Analogue outputs of visibility range
- ▶ Extended self test and maintenance information
- ▶ The extended visibility range up to 50 km exceeds the usual limit of 16 km for obstruction to vision information required by national weather services and standard coding procedures.
- ▶ The enhanced present weather information is due to the backscatter receiver which allows detailed precipitation analysis including precipitation intensity information and accumulation totals for 24 hour periods.

SPECIFICATIONS	
<i>Specifications subject to change without notice</i>	
Visibility Measurements	
Measures	Visibility (MOR) WMO 4680 present weather codes
Output	Digital, analogue and switching relays
Range (visibility)	*Selectable: 10m to 2km, 10km, 20km, 32km, 50km or 75km
Measurement Error	<=5% at 2km, <=10% at 10km, <=15% at 20km, <=20% at 30km
Measurement Principle	Forward scatter meter with 39° to 51° angle, centred at 45°
Precipitation Detection Resolution	Rain: 0.015mm/hr 90.0006 in/hr Snow: 0.0015mm/hr (0.00006 in/hr)
Maximum Rain Rate	250 mm/hr (10in/hr)
Rain Rate Accuracy	<=15%
Outputs and Reports	
Output rate (seconds)	10 to 300 (selectable)
Serial outputs	RS232, RS422 and RS485
Analogue outputs	0-10V (4-20mA or 0-20mA optional)
Switching Relays (providing flexible configurations)	Relay 1= Fault Relay 2 = visibility (user selectable value) Relay 3 = precipitation yes/no or snow yes/no or visibility (user selectable)
Outputs	WMO 4680 present weather codes
Power Requirements	
Sensor power	9-36 VDC (AC with optional mains adaptor)
Hood heating power	24 V AC or DC
Basic sensor Window heaters Hood heaters	3.5 W 1.7 W 36 W
Additional Features	
Window Heaters	Fitted as standard to both sensor head windows
Window contamination monitoring	Fitted as standard on the transmitter window. Optional on all 3 sensor head windows
Hood Heaters	Fitted as an option to all 3 sensor head windows
Environmental	
Operating temperature	-40°C to +60°C
Operating humidity	0 - 100% RH
Protection rating	IP66
Certification & Compliance	
CE certified	
EMC compliance with EN61326-1997, 1998, 2001	
RoHS and WEEE compliant	
Physical	
Material	Powder coated aluminium
Weight	3.5 Kg
Length	0.81
Warranty	2 Years
Lifetime	>10 Years

SPECIFICATIONS cont'd - Maintenance	
Self-test capability	Fitted as standard
User confidence check	6 months recommended
Window cleaning	Automatic compensation and warnings
Field calibration	With optional calibration kit

ORDERING	
SWS-200	Present Weather Sensor (delivered in sturdy recyclable foam filled packaging w 3m RS232 auxiliary cable, pole mounting kit (U bolt, saddle and bolts)\, (manual, cal.certificate
Accessories	Power & data cables. Mains power adaptor. Calibration kit (for user checks). Hard shell transit case. Post adaptor (for mounting to HA posts)