

## MVS-20

### Accuracy and reliability

The visibility sensor from Mediterráneo Señales Marítimas, model MVS-20 is designed for general meteorological applications where accurate and reliable visibility measurements are required.

### High quality and resistant materials

It is manufactured with high-quality and resistant materials to achieve a long-service life under the harshest marine conditions.

Heating of the optical windows and sensor hoods is provided as standard, allowing the use of the MVS-20 in the harshest weather conditions.

### Suitable for offshore applications

With a measurement range up to 75 km, the sensor is suitable for use in offshore applications as well as meteorological observation networks.

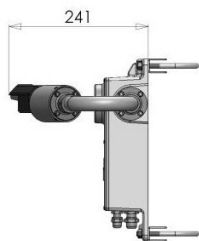
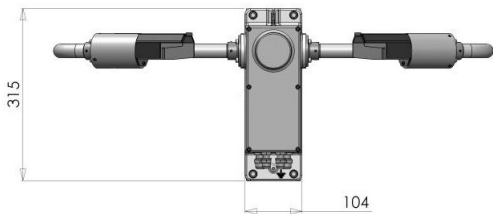
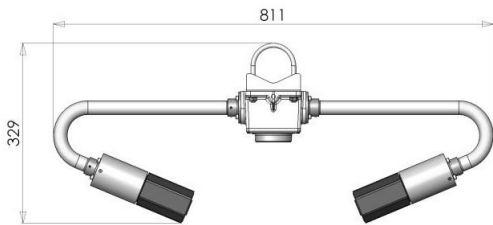


## FEATURES

- *Monitors visibility and obstruction to vision caused by dust, fog, rain, drizzle, snow and hail.*
- *Selectable measurement range up to 75km.*
- *Compact forward scatter design.*
- *Flexibility to connect to a wide range of data collection/processing units.*
- *Easy installation due to its light weight and small footprint.*
- *Optical window and sensor hood heating for use in extreme environments.*
- *Full date/time stamp in data string provided by the real time on-board clock.*
- *Simple field calibration, automatic sequence can be initiated after fitting calibration plaque.*
- *Comprehensive self-test and maintenance data.*
- *Not affected by local lights.*
- *Low power consumption.*

# MVS-20

**!** Specifications subject to change without previous notice.



## Power requirements

Power source sensor (Voltage):	From 9V to 36V d.c. (24V typical).
Power source sensor (Power):	3.5W.
Power source Hood Heaters (voltage):	24V d.c. (or a.c.).
Power source Hood Heaters (Power):	24 W.
Additional Power for window heaters:	1,7 W.

## Materials and environment

Material:	Powder coated aluminium.
Scattering angle:	45° with ± 6° cone angle.
Sample volume:	4,0 cm <sup>3</sup> .
Weight:	3,5 kg.
Length:	0,81 m.
Temperature range:	From -40° to 60°C.
Altitude:	From 0 to 20,0,0 ft.
Precipitation:	All weather.
Humidity:	From 0 to 100%.
Watertightness degree:	IP 66.

## Outputs Reports

Output rate (seconds)	30 to 3,0 (selectable)
Serial outputs	RS232, RS4,2 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	Selected WMO 4,80 table codes

## Outputs Reports

Instrument identification number (Programmable).  
Reporting interval (Seconds).  
Meteorological optical range (Kilometres).  
Precipitation type.  
Obstruction to vision (Fog, haze, none).  
Precipitation amount (One minute interval).  
Temperature.  
Remote self-test & monitoring flags.  
Date and time tags.

## Measurement specifications

Measures:	Visibility (MOR).
Visibility range:	Up to 75 km.
Measurement accuracy:	≤ 10% at 10 km.
Measurement principle:	Forward scatter meter with 39° to 51° angle.

## Standards

CE Certified.  
EMC compliance with EN61326-1997, 1998, 2001.  
RoHS and WEE compliance.