



Mod. PWS

Visibility & Present Weather Sensor

Highlighted specs

- WMO and ICAO standards compliant
- Accurate and reliable visibility&present weather sensor
- Infrared measuring system
- Compact and light design in aluminium
- Especially suitable for AWOS applications
- Available with heating system in different levels
- According to C€ norms

Biral visibility and present weather sensor. Visibility range: 10m ÷ 50km (selectable full scale 2km, 10km, 20km, 32km or 50km), recognizing the type and amount of precipitation (presence of fog, haze, smoke, sand, drizzle, rain, snow and precipitation). This sensor has the features of the disdrometer and visibility measuring in a compact solution. Infrared measuring principle with distinction of phenomena according to WMO regulations reference table 4680 and 9328 ICAO standard. Standard output: RS485 (analogical output and heater option available). This sensor is suitable for applications in various fields of environmental monitoring, and is particularly suitable for the AWOS weather stations in the aeronautical field. Easy to install, requires no periodic calibration and it's protected from overvoltage and corrosive agents. The sensor is designed to mounting on pole by two adjustable collars (included).

Typical range	VIS: 10 ÷ 20.000mt (up to 75Km on request); Type of phenomena: presence of fog, haze, smoke, sand, drizzle, rain, snow and precipitation up to 250 mm/h
Resolution	VIS: 10mt; rain: 0.015 mm/h, snow: 0.0015 mm/h
Average Accuracy	VIS ± 10%, rain-snow: <15%
Response time	<10 s
Type of transducer	Infrared
Standard output signal	RS485 (baud rate 10÷300 selectable)
Working conditions	-40°C ÷ +60°C
Protections	Polarity reverse and transient
Made of	Aluminium alloy, stainless steel screws
Power supply and consumption	10÷35Vdc, max 55W with heaters
Weight	3,3 Kg

Size and connections

Wire	PWS
Yellow	RS485 Rx+
White	RS485 Rx-
Green	RS485 Tx+
Orange	RS485 Tx-
Black	GND
Red	10÷35Vdc
Grey	Shield RS485
	Yellow White Green Orange Black Red



Order Code

Sensor	Biral Visibility&present weather sensor PV	ws			
Output	RS485 / Modbus		С		
	CS05 – Cable 5m sensor-datalogger			05	
ries	CS10 – Cable 10m sensor-datalogger			10	
Accessories	CSxx – Cable xx* m length, sensor-datalogger – to be specified at order			xx	
Acc	RS232/485 digital interface for Nesa dataloggers			RS	
	Heating (can be activated only on the transducer or even on the support arms)				F
*speci	fy the length for no standard measures example of order code PV	NS	С	10	R