3S-WD-MB-H

Heated Wind Direction Sensor

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SEVEN Heated Wind Direction Sensor is designed to deliver reliable performance in harsh weather conditions. It accurately measures horizontal wind direction even when ambient temperatures approach freezing and icing is expected.

An internal temperature sensor continuously monitors the ambient temperature. When the temperature drops below a set threshold, the built-in heating element activates automatically to protect the sensor from freezing. This ensures wind direction measurements remain accurate and uninterrupted, and are reliably transmitted to connected systems.

The Wind Direction Sensor uses a **Hall Effect Position Sensor** operating based on magnetic field influence. This sensor detects changes in wind direction and converts them into a signal.

SEVEN products use reliable, high-quality components to provide accurate meteorological information in environmental and industrial applications.

Benefits and Features

- High Accuracy
- Fast & Simple to Install
- Robust and Reliable Mechanical Design
- Free Software Updates
- SunSpec Compliant
- SEVEN Remote Setup Service
- SEVEN Customer Support
- 2 Year Warranty

Technical Specifications

Sensor Type	Vane-Driven Hall Effect Position Sensor
Measurement Range	0-359,9°
Accuracy	±5° from the measured value (Optional ±1°)
Resolution	0,1°
Threshold	1 m/s
Data Output	RS485 up to 38400 Baud
Communication Protocol	Modbus RTU
Power Supply	18 to 30 V DC (24 V DC recommended)
Power Consumption	Typicallly @ 24V DC; Heating ON: 1 A Heating OFF: 53 mA
Cable Length & Features	1 m 3x2x0,22 mm², LI2Y(st)C11Y Cable, UV and Weather Resistant
Operating Temperature Range	-40°C to +85°C
Operating Humidity Range	0 to 100% Relative Humidity
Dimensions	265 mm x 285 mm
Weight	0,34 kg
IP Rating	IP54
Housing Material	Aluminum and Polyamide
Vane Material	PA6GF4
Mounting Method	Pipe or Ground Mounting
Standard	Compliant to IEC 61724-1:2021
Heating Range	**Blue Light:** 10°C < Internal Aluminum Temperature (°C) (No Heating)
	Red Light: Internal Aluminum Temperature ≤ 10°C, heating starts; when it reaches 20°C, heating stops
Origin	TÜRKİYE

Note: SEVEN has the right to make changes to this document without prior notice.

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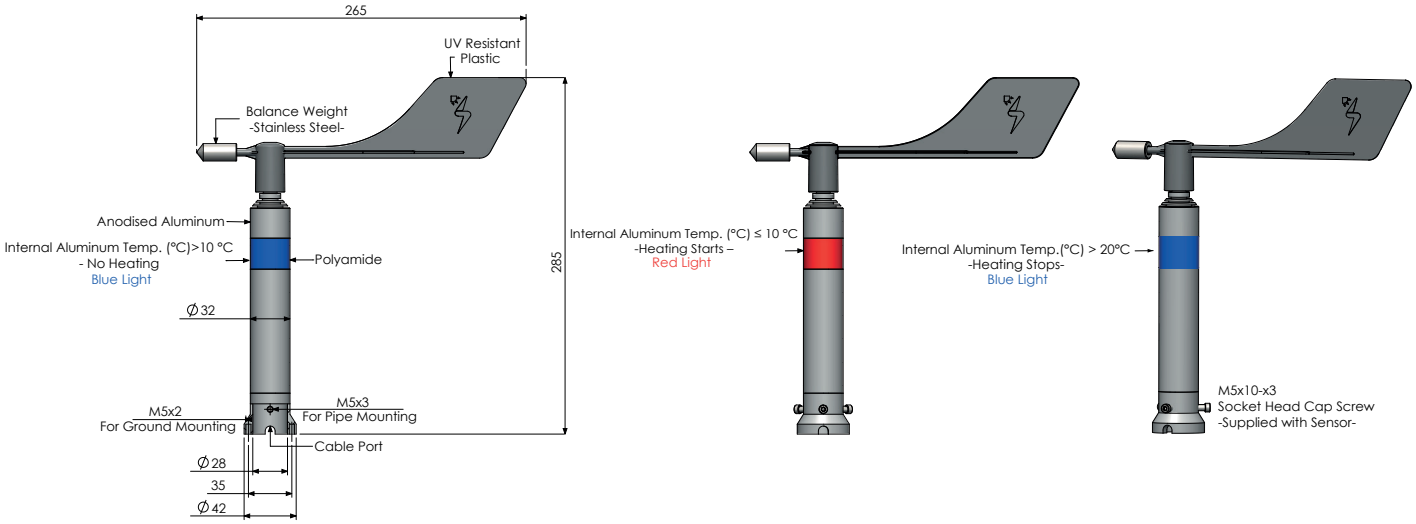
Revision 0.1 / **Created** 25.08.2026

Technical Drawings



Note: All dimensions are in mm.

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