

# 3S-WD-MB-H

Heated Wind Direction Sensor



## Heated Wind Direction Sensor

**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

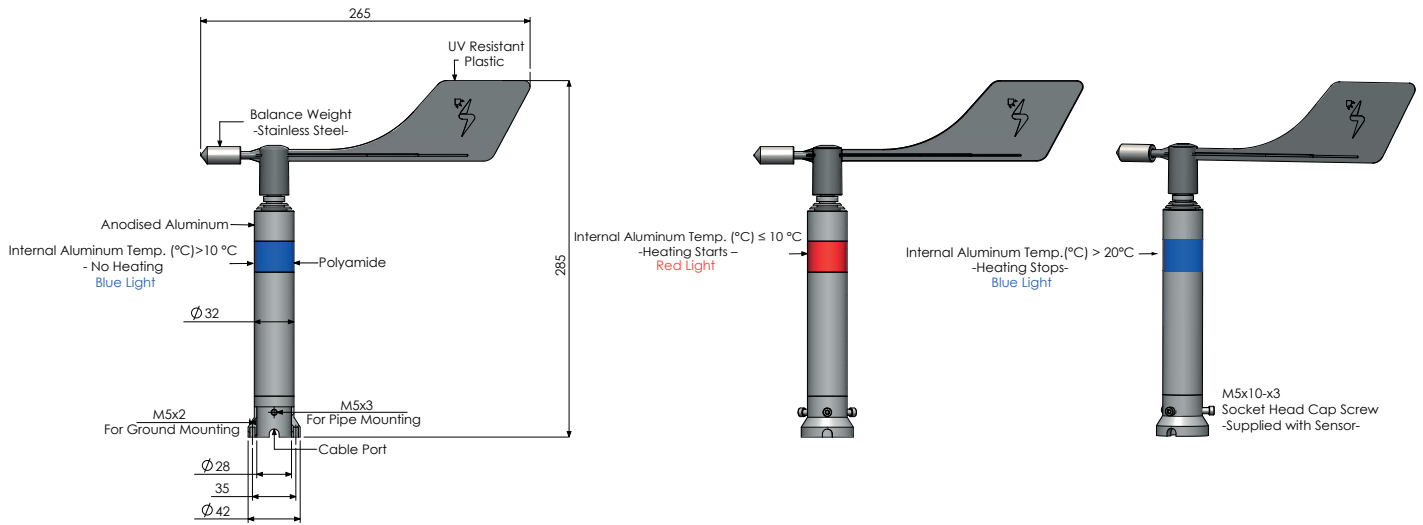
<b>Sensor Type</b>	Vane-Driven Hall Effect Position Sensor
<b>Measurement Range</b>	0-359,9°
<b>Accuracy</b>	±1% of Measuring Value
<b>Resolution</b>	0,1°
<b>Threshold</b>	1 m/s
<b>Data Output</b>	RS485 up to 38400 Baud
<b>Communication Protocol</b>	Modbus RTU
<b>Power Supply</b>	18 to 30 V DC (24 V DC recommended)
<b>Power Consumption</b>	Typically @ 24V DC; Heating ON: 1 A Heating OFF: 53 mA
<b>Cable Length &amp; Features</b>	1 m 3x2x0,22 mm <sup>2</sup> , LI2Y(st)C11Y Cable, UV and Weather Resistant
<b>Operating Temperature Range</b>	-40°C to +85°C
<b>Operating Humidity Range</b>	0 to 100% Relative Humidity
<b>Dimensions</b>	265 mm x 285 mm
<b>Weight</b>	0,34 kg
<b>IP Rating</b>	IP54
<b>Housing Material</b>	Aluminum and Polyamide
<b>Vane Material</b>	PA6GF4
<b>Mounting Method</b>	Pipe or Ground Mounting
<b>Standard</b>	Compliant to IEC 61724-1:2021
<b>Heating Range</b>	<b>Blue Light:</b> 10°C < Internal Aluminum Temperature (°C) (No Heating) <b>Red Light:</b> Internal Aluminum Temperature ≤ 10°C, heating starts; when it reaches 20°C, heating stops
<b>Origin</b>	TÜRKIYE

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

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## Technical Drawings



**Note:** All dimensions are in mm.