

Wind Direction Sensor



The Wind Direction Sensor is part of the SEVEN meteorological sensor range, which includes professional and intelligent measuring sensors with a digital or analog interface for environmental and industrial applications such as PV plants.

A Hall Effect Position Sensor is used on the vane of the Wind Direction Sensor. This sensor detects changes in wind direction and converts them into a signal.

The measured wind direction data are transmitted as analog or digital output signals to the data loggers and receiver units according to the input requirements.

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

They are specially designed according to the requirements of PV plant monitoring systems.

Benefits and Features

- High Accuracy
- Fast & Simple to Install
- Low Power Consumption
- Free Software Update
- SunSpec Compliant (for Modbus RTU)
- SEVEN Remote Setup Service
- SEVEN Customer Support
- 2 Years Warranty

Models

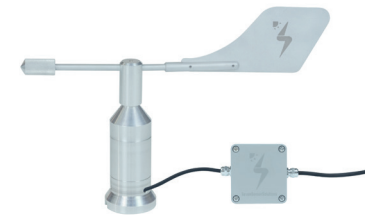
3S-WD

Small and economical wind direction sensors with 0-3.3 V analog output. They are ideal measurement transmitters with the best price/performance ratio for the standard requirements of industrial and environmental applications such as PV plants. It can be connected to SEVEN Irradiance Sensor, Sensor Box, and Compact Weather Station models via a pin connector.



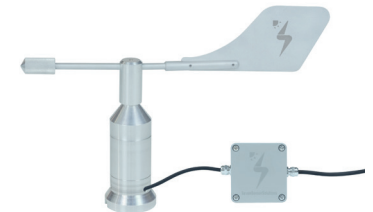
3S-WD-I

Wind direction sensors with 4-20 mA analog output are specially designed for advanced industrial applications and environmental conditions. The housings are made of seawater-resistant aluminum, making them extremely durable and resistant.



3S-WD-MB

Professional and intelligent measuring sensors with a digital interface for environmental and industrial applications such as PV plants. The measured value can be transmitted to monitoring instruments, data loggers, and other receiving units via the serial RS485 interface with the MODBUS RTU protocol.



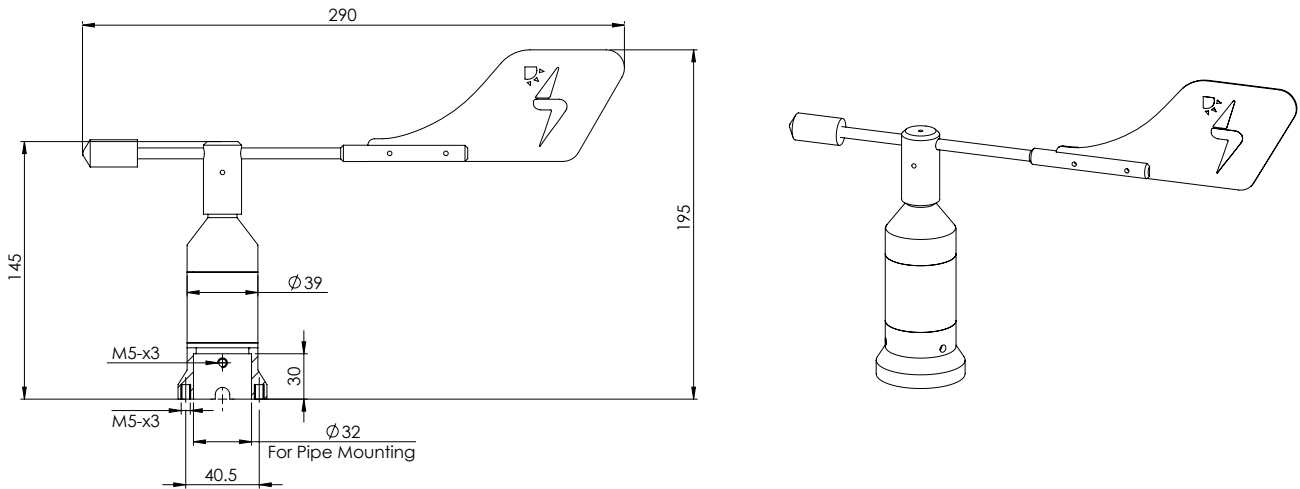
Technical Specifications

	3S-WD	3S-WD-MB	3S-WD-I
Sensor Type	Vane-Driven Hall Effect Position Sensor		
Measuring Range	0-359°		
Accuracy	±1% of Measuring Value		
Resolution	1°		
Start Speed	1 m/s		
Data Output	Analog (0 V – 3.3 V)	Modbus RTU - RS485	Analog 4-20 mA
Communication Protocol	-	Modbus RTU	-
Power Supply	-	12 to 30 V DC	
Power Consumption	-	20 mA typically at 24 VDC	30 mA typically at 24 VDC
Electrical Connection	3 m LIYY Cable, UV and Weather Resistant	3m LIYYC11Y PUR Cable, UV and Weather Resistant	
Operating Temperature Range	-40°C to +85°C (Ice Free)		
Dimensions	Ø: 290x195 mm		
Box Dimensions	-	L x W x H : 55x80x82 mm	
Weight	0,25 kg		
Box Weight	-	0,25 kg	
IP Rating	IP 54 (IP67 Optional)		
Housing Material	Aluminum		
Vane Material	Aluminum		
Box Material	-	ABS (Color may change when exposed to sunlight.)	
Mounting Method	Pipe or Ground Mounting		
Standard	Compliant to IEC 61724-1:2021		
Origin	TÜRKİYE		

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

Technical Drawings

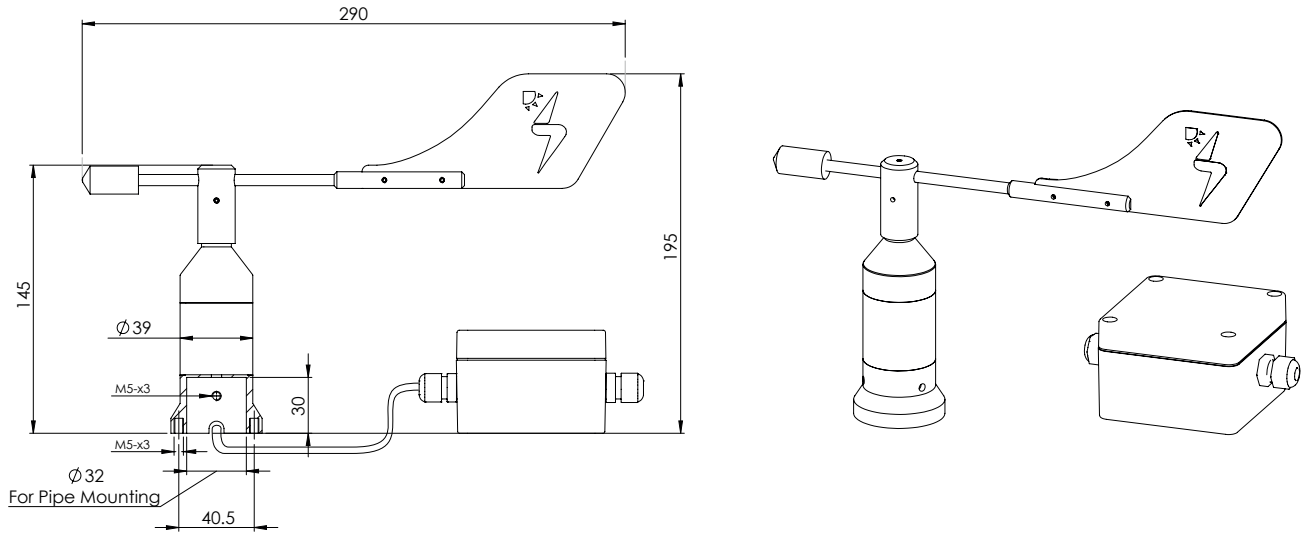
3S-WD Technical Drawing



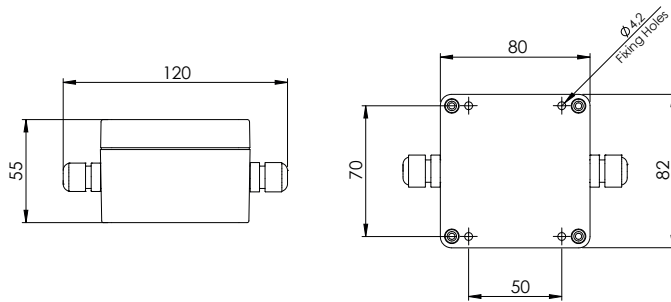
Note: All dimensions are in mm.

Technical Drawings

3S-WD Technical Drawing



Electronic Box Technical Drawing



Note: All dimensions are in mm.