



**allweatherinc**

# Ultrasonic Wind Sensor Model 9620

## Overview

The Model 9620 Ultrasonic Wind Sensor provides one of the best solutions on the market for reliable, accurate and cost-effective wind speed and direction measurements. The sensor combines the latest patented advances in ultrasonic technology with AWI's years of experience as the recognized leading world supplier of all weather sensors. The elimination of moving parts, together with a compass that offers the option for the wind direction to be corrected, means that the Model 9620 Ultrasonic Wind Sensor is virtually maintenance-free and requires no calibration on site. The covered head and built-in heater keep the unit free from ice and snow, providing continuous use even in the most extreme weather conditions.

A flexible design ensures that the Model 9620 Ultrasonic Wind Sensor can be configured to the user's exact requirements, including output units and/or communication speeds.



- **Virtually Maintenance Free**
- **No On-Site Calibration**
- **Built-In Compass**
- **NIST Traceable**

## Features

The Model 9620 Ultrasonic Wind Sensor is a compact, robust, lightweight unit with no moving parts, and outputs wind speed and direction measurements. The wind speed units, output rate, and data formats are all user selectable, and are configured using standard communications software on a PC.

The wind sensor can be used several ways.

- As part of an Automated Weather Observation System (AWOS)
- Can be connected to a PC, datalogger or other device compatible with its RS-422/RS-485 output.

- Multiple units may be networked.
- Connects directly to AWI's Wind Display to provide a complete wind speed direction system without any configuration by the user.

The output message can be configured either as a Continuous Output or Polled (response to request by host system).

The Model 9620 Ultrasonic Wind Sensor is NIST traceable and is compliant with the most current Federal Aviation Administration (FAA) regulatory requirements.

SENSORS

## SPECIFICATIONS

Parameter	Specification
Sampling Rate	10 seconds
Parameters	Wind Speed, Wind Direction, Status
Averaging	Flexible 1–120 seconds
Response Threshold	0.3 m/s
<b>Wind Speed</b>	
Units	m/s, kts, mph, km/h
Range	0–75 m/s (0–145 kts)
Accuracy	±0.3 m/s to 35 m/s, ±5% above 35 m/s (68 knots)
Resolution	0.1 m/s
<b>Wind Direction</b>	
Range	0–359.9°
Dead Band Direction	None
Accuracy	± 2°
Resolution	1°
Respose time	Instantaneous
Alignment Correction	Built-In Compass
<b>Output</b>	
Communication	RS422 / RS485, 2-wire, half duplex
Baud Rates	1200, 2400, 4800, 9600 14400, 19200, 28800, 57600"
Formats	8-N-1
Status	Included as part of standard message
<b>General Specifications</b>	
Power Supply	4–32 VDC
Heating	24 V DC (at 20 V•A)
Operating Temperature Range	-50°C to +60°C
Operating Relative Humidity	0% to 100%
Moisture Protection	IP66 (NEMA4X)
EMC	89/336/EC 73/23/EC
NIST Traceability	DIN 55350-18-4.2.2 Certification
MTBF	44 years

## ORDERING INFO

Part Number	Description
9620	Ultrasonic Wind Sensor

## DIMENSIONS & WEIGHTS

Size	194 mm H × 150 mm φ
Weight	0.8 kg



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