

Industrial Ultrasonic Transducers



Sensor technology for your environment.



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 **AIRMAR**[®]
TECHNOLOGY CORPORATION



About AIRMAR Technology Corporation

AIRMAR develops and manufactures transducers for a diverse range of applications, including air-ranging industrial transducers, underwater scientific and survey transducers, weather sensing instruments and our extensive line of fish-finding transducers.

Product Overview

Model	Frequency	Diameter	Typical Range	Beamwidth
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AR20	20 kHz	ø 205 mm	80 cm to 40 m	7°
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AR30	30 kHz	ø 106 mm	80 cm to 25 m	12°
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ARK30	30 kHz	ø 106 mm	80 cm to 25 m	12°
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PVDF housing for chemically aggressive environments



AR41	41 kHz	ø 92.2 mm	35 cm to 15 m	14°
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ARK41	41 kHz	ø 92.2 mm	35 cm to 15 m	14°
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PVDF housing for chemically aggressive environments



AR50	50 kHz	ø 92.2 mm	30 cm to 10 m	12°
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AR50CH	50 kHz	ø 57 mm	30 cm to 10 m	12°
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Model	Frequency	Diameter	Typical Range	Beamwidth
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ARK50-THD	50 kHz	ø 51 mm 2" pipe thread	35 cm to 10 m	10°
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PVDF housing for chemically aggressive environments



AT50	50 kHz	ø 57 mm	35 cm to 10 m	12°
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ATK50	50 kHz	ø 57 mm	35 cm to 10 m	10°
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PVDF housing for chemically aggressive environments

ARK50	50 kHz	ø 92.2 mm	35 cm to 10 m	10°
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PVDF housing for chemically aggressive environments



ARK75-THD	75 kHz	ø 40.6 mm 1.5" pipe thread	25 cm to 7 m	14°
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PVDF housing for chemically aggressive environments



AT75	75 kHz	ø 38 mm	25 cm to 7 m	15°
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ATK75	75 kHz	ø 38 mm	25 cm to 7 m	14°
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PVDF housing for chemically aggressive environments



The Ultrasonic Advantage

Airmar's ultrasonic transducers provide non-contact solutions for your toughest sensing problems. Safe, rugged and reliable, our transducers function extremely well in harsh environments. Airducers® are rated IP68 and have no movable parts to break down.

Model	Frequency	Diameter	Typical Range	Beamwidth
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AT120



120 kHz	ø 25 mm	20 cm to 3 m	12°
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ATK120



120 kHz	ø 25 mm	20 cm to 3 m	10°
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PVDF housing for chemically aggressive environments

ARK120-THD



120 kHz	ø 40.6 mm 1.5" pipe thread	20 cm to 3 m	12°
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PVDF housing for chemically aggressive environments

AT200



200 kHz	ø 16 mm	12 cm to 2 m	12°
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ATK200



200 kHz	ø 16 mm	12 cm to 2 m	10°
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PVDF housing for chemically aggressive environments

AT225



225 kHz	ø 13 mm	10 cm to 1.5 m	15°
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AT300

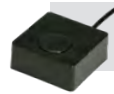


300 kHz	ø 12 mm	5 cm to 50 cm	10°
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Model	Frequency	Diameter	Typical Range	Beamwidth
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TTW-550 — *NEW PRODUCT!*

PATENT PENDING



Variable	63 mm X 63 mm	.2 m to 3.75 m	N/A
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Introducing the TTW-550

The new TTW-550 is a non-invasive ultrasonic liquid level sensor. Utilizing patented processing, the sensor automatically selects the waveform best suited for the specific tank material and provides continuous bottom-up liquid level detection. The sensor is suitable for external mounting on plastic, steel, plastic and stainless steel tanks and totes, including sealed/pressurized tanks.



Note: Patent Pending

SPECIFICATIONS

Acoustic Output: Adaptive to a wide range of tank material and thicknesses

External Signal Interface: RS 485, half duplex

Level Range: Minimum .2 m to 3.75 m

Power Draw: 2 Watts Max.

Power Voltage: +7VDC +/-1.0V

External Tank Temp Accuracy: +/- 1°C

Temperature Range: -10°C to +60°C

Relative Humidity: 0% to 100%

IP Rating: (Ingress Protection) IP68

Depth Resolution: 20 mm

Weight: 227 g

Cable Length: 4 m Typical

Housing Material: Glass filled polyester

Board provided, but power will interface to customer provided electronics



WX Ultrasonic WeatherStation® Instruments for Land Applications

Delivering a Compact, Affordable Instrument for Informed Decision-Making

Monitoring atmospheric conditions can be a critical function for road construction jobs. It's well known that certain materials must be deployed in specific temperature or humidity windows in order to achieve desired results. The WX Series allows users to make informed decisions based on site specific information, resulting in improved efficiency, reduced risks and overall cost savings. Various model options are available for both stationary, mobile and deployable applications.

The WX Series WeatherStation Instruments offer a truly best-in-class solution at a better price point compared to any other weather monitoring system on the market today!



Now available on iTunes — OnSiteWX
The innovative App for real-time weather data!



110WX
Apparent Wind Model



150WX
Apparent & Theoretical Wind Models



200WX
Apparent & Theoretical Wind Models

	Recommended for Stationary Applications	Recommended for Moving Vehicle Applications	Recommended for Dynamic Moving Vehicle Applications
Apparent wind speed and angle	✓	✓	✓
Theoretical wind speed and direction		✓	✓
Barometric Pressure	✓	✓	✓
Ultrasonic wind readings up to 90 mph (78 knots, 40 m/s)	✓	✓	✓
Air temperature plus calculated wind chill	✓	✓	✓
10 Hz GPS (Position, COG, SOG)		✓	✓
Two-axis solid state compass		✓	
Three-axis accelerometer for pitch and roll		✓	✓
Three-axis solid-state compass with dynamic stabilization: Better than 1° static compass accuracy Best-in-class 2° dynamic compass accuracy			✓
Three-axis rate gyros provide rate-of-turn data			✓
Best-in-class pitch and roll accuracy			✓
Optional field-serviceable relative humidity Calculated dew point Calculated heat index	✓	✓	✓
Output options include: NMEA 0183 (RS422) and NMEA2000® (CAN Bus) NMEA 0183 (RS232) and NMEA2000® (CAN Bus)	✓	✓	✓



Optional Factory Mutual Approval
Class I, Division 1, Groups A, B, C, & D



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