

ARK30



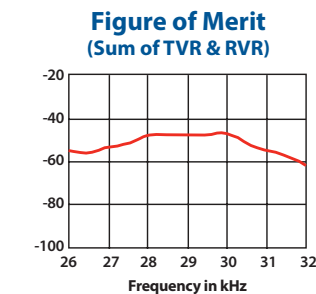
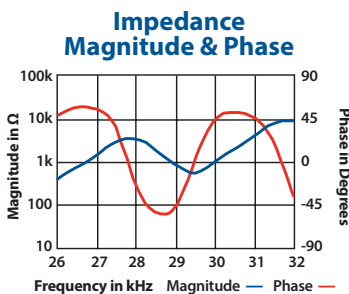
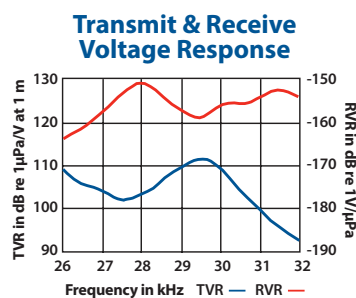
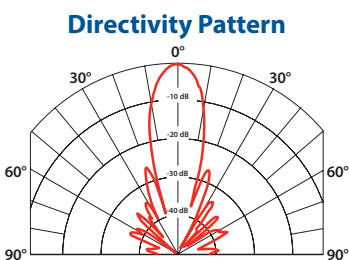
Optional cap kit

SPECIFICATIONS

Best Operating Frequency: 30 kHz, $\pm 4\%$
Minimum Transmit Sensitivity at Best Transmit Frequency:
 105 dB re 1 μ Pa/V at 1 m
Minimum Receive Sensitivity at Best Receive Frequency:
 -155 dB re 1V/ μ Pa
Minimum Parallel Resistance: 700 Ω , $\pm 30\%$
Minimum and Maximum Sensing Range*: 60 cm to 30 m
Typical Sensing Range: 80 cm to 25 m
Free (1 kHz) Capacitance: 5,700 pF, $\pm 20\%$ pF
Beamwidth (@ -3 dB Full Angle): 12°, $\pm 2^\circ$
Maximum Driving Voltage (2% Duty Cycle Tone Burst): 2,200 V_{pp}
Operating Temperature: -40°C to 90°C
Weight: 800 g
Housing Material: Kynar[®] 720
Acoustic Window: Kynar[®] 720

*Pulse-Echo Mode: Minimum and maximum ranges are best case scenarios. Actual range may vary, depending on drive circuitry and signal processing.

Note: Optimally, performance measurements should be taken when the transducer reaches a steady state.



30 kHz

AIRDUCER[®] Ultrasonic Transducer

Applications

- Level measurement
- Level measurement in chemically aggressive environments
- Food and beverage processing
- Proximity sensing
- Obstacle avoidance

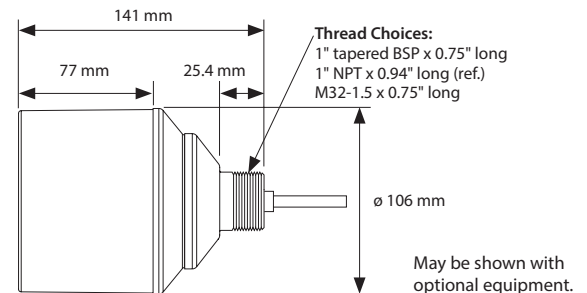
Features

- Rugged sealed construction
- Housing design will accommodate transceiver and signal processing electronics
- Standard internal shielding

Options

- Cable length can be customized
- 10 K Ω thermistor available for temperature compensation
- Mounting caps available in BSP, NPT, or M32 threads
- Available in alternate housing material (AR30)

Dimensions



Additional Resources

Theory of Operations



Applying Ultrasonic Technology



T1 Developer Board



Airmar's T1 Developer's Transceiver Module can be used for evaluation of AIRDUCER[®] Transducers.