

Ultrasonic Air Transducer Transceiver Module

Technical Data Sheet

T1

Developer's Module for Evaluation of AIRDUCER® Transducers

Designed for fast and easy evaluation of Airmar's Ultrasonic Transducers, we are pleased to offer our versatile, T1 Transceiver Module. The entire frequency range of 30 kHz to 300 kHz Airmar transducers can be driven by the T1. With transmit voltage output of $200\,V_{pp}$ to $500\,V_{pp}$ and adjustable pulse width and frequency, the suitability of a piezoelectric transducer for a specific application can be clearly assessed.

A selectable receiver gain up to 60 dB allows amplification of echoes and viewing of waveforms on any oscilloscope. The T1 is a compact printed circuit board 76 mm x 76 mm and offers convenient connections to our ultrasonic transducer and your power supply.



SPECIFICATIONS

Transmit Voltage: $200 \, V_{pp}$ to $500 \, V_{pp}$

Selectable Receiver Gain: 0 dB, 20 dB, 40 dB, or 60 dB

Frequencies:

 $30~kHz,\,41~kHz,\,50~kHz,\,75~kHz,\,120~kHz,\,200~kHz,\,225~kHz~or~300~kHz$

Supply Voltage: 15 VDC

Printed Circuit Board Size: 76 mm x 76 mm

30-300 kHz

Transceiver Module

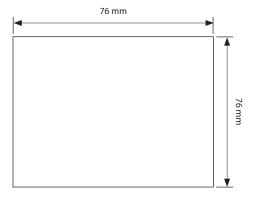
Applications

- · Echo-ranging
- · Liquid-level detection
- Obstacle avoidance
- Proximity sensing

Features

• Frequency and pulse width adjustable

Dimensions



Additional Resources

Theory of Operations



Applying Ultrasonic Technology





