

## Ultrasonic Transducers 82 KHz (P Wave) – Waterproof Design

### Description

CAN-82-P-WP Ultrasonic Transducers are Piezoelectric Transducers designed for Underwater Testing applications. These are useful for Low Frequency Non-Destructive Testing (NDT) applications. The nominal resonance frequency of CAN-82-P-WP is 82KHz.

When used as Transmitters (Tx), the CAN-82-P-WP transducers generate Longitudinal Waves (P-Waves) for coupling into the test specimen. When used as Receivers (Rx), the CAN-82-P-WP exhibit highest sensitivity levels to incident 82KHz P-wave signals.

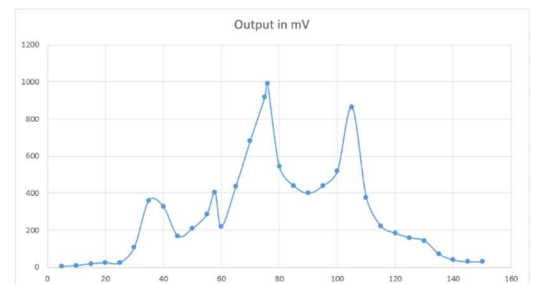
Typically, the CAN-82-P-WP transducers find use in **Transmit-Receive (T/R)** as well as **Pulse-Echo (P/E)** type NDT testing applications.

These sensors have small diameter (20mm) and feature a lightweight, Water Proof & rugged Aluminum body with Water Proof connector for Co-axial Cable connection.



### Specifications

Element	Piezoelectric Ceramic
Transducer Type	Longitudinal Wave (P Wave)
Center Frequency	82 KHz; $\pm 3$ KHz
Frequency Range (3dB)	75 to 90 kHz
Max Excitation Voltage	$< \pm 1000$ V
Operating Temperature Range	-10 to +50 Deg. C
Dimensions	25 mm Dia X 98 mm H
Weight	70 grams
Case Material	Aluminum
Connector	Water Proof LEMO Connector
Connector Locations	Top Side



### UNDERWATER ULTRASONIC TESTING APPLICATIONS

- Inspection of submerged Concrete columns and structural members
- Inspection of ships
- Imaging using sensor array
- Location of Submerged objects
- Sonar



#### Related Products

- Ultrasonic Pulse Velocity (UPV) Testing Equipment.  
Models: **CUTE103A & CUTE102X0**
- Ultrasonic Pulser-Receiver with High Voltage Tone Burst Capability.  
Model: **CUTE104A**



- ✓ Transducers Frequency Range : 24KHz – 500 KHz
- ✓ Immersion Transducers for Under Water Testing Applications
- ✓ NEW: Receiver Probes with In-built Pre-Amplifier (26dB Gain)

#### Ordering information and Accessories

**CAN-82-P-WP**

**CAN-82-P-WP**

**Cable (specify length '-XX' m at end of PN)**

**5 m**

**With Out Pre-Amplifier**

#### About Us

**CANOPUS INSTRUMENTS** is engaged in the development & manufacturing of industrial automation and process control instrumentation products. The product areas cover mainly Analog Signal Conditioning Instruments for Process Automation, Embedded Systems & Ultrasonic Equipment for Non-Destructive Testing Applications.

All the CANOPUS range of products are designed and manufactured with special care, to ensure trouble free performance in Industrial applications where Electromagnetic Interference (EMI) & Harsh environmental conditions exist.

Today these products come to our customers with the quality assurance and tech-support in H/W & S/W, which has evolved with our experience of over 25 years, to ensure uninterrupted operation in field conditions. This has enabled us to successfully create an installed base of tens of thousands of units performing satisfactorily in a wide spectrum of Critical Real time Industrial applications all over India and in other parts of the world.

**INNOVATION – QUALITY – RELIABILITY**



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