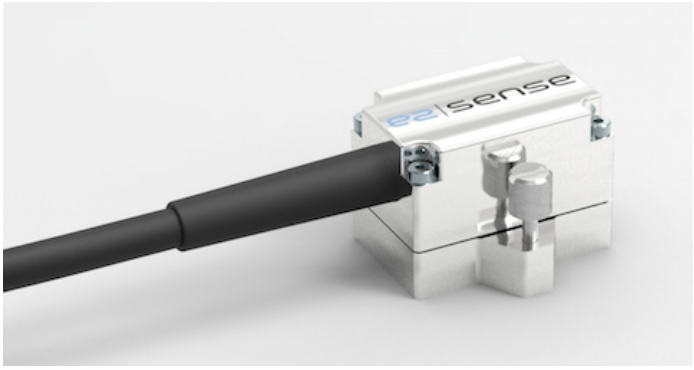
e2|sense
Specialized Ultrasonic Sensors

Hi-Temp Phased-Array Ultrasonic Probes

HTPA and XHTPA Series

The HTPA Series from ***e2sense*** allows for continuous phased-array ultrasonic testing at temperatures up to 350°C. The ultrasonic transducers are manufactured with unique sol-gel piezoelectric depositions, a proven technology* used on permanent installations in structural health monitoring applications.

The HTPA probes are available in different linear array configurations, with a broad range of operating frequencies.



Applications

- Weld inspection
- Thickness measurement
- Permanent or semi-permanent monitoring

Features

- **Continuous operation at maximum rated temperature (direct contact)**
- **No cooling system required**
- 16, 32, 64 and 128-element linear arrays
- Operation frequency from 2.5 to 10 MHz
- **Hi-temp wedges** available

Specifications	HTPA	XHTPA
Maximum temperature rating (°C / °F)	200 / 390	350 / 660
Number of elements	16, 32, 64 or 128	16, 32 or 64
Operation frequencies (MHz)	2.5, 5, 7.5 or 10	
Element pitch (mm)	0.31, 0.5, 0.7 or 1.0	0.5, 0.7 or 1.0
Element width (mm)	5, 10, 15 or 20	
Cable length (m)	3 or 5	
Connector	Hypertronics®, Omniscan®, VEO®, Topaz® or Zircon®	

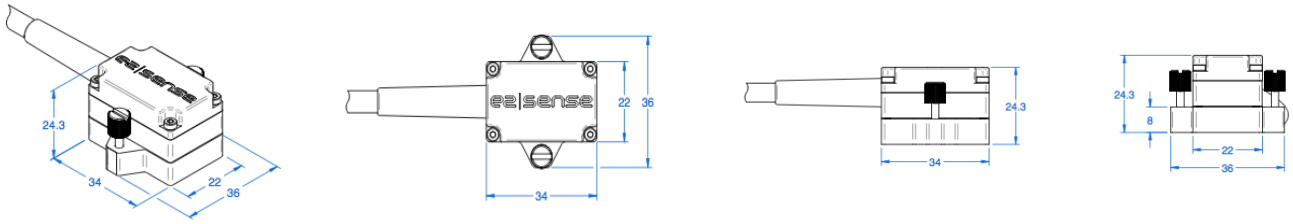


Figure 1: Mechanical dimensions of a 32-element @ 0.7 mm pitch HTPA probe

*This product contains technology under licence from the National Research Council Canada.

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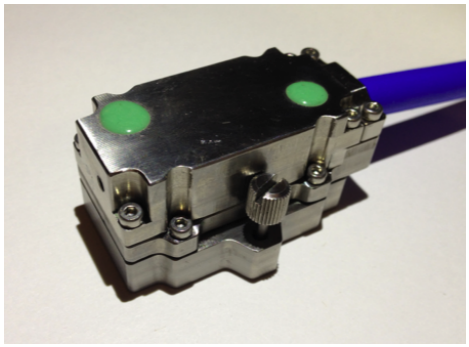
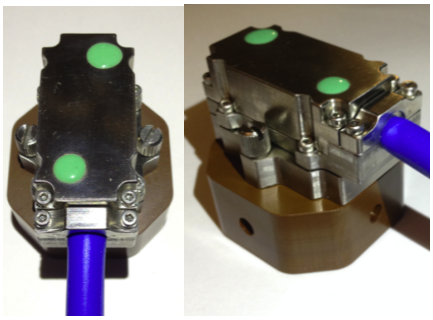
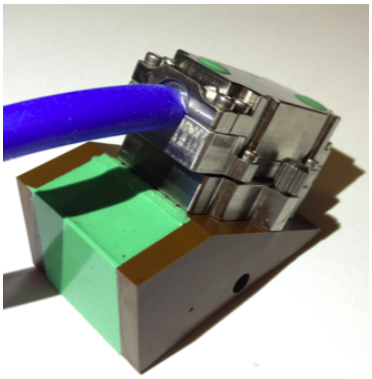


HTPA



HTPA on flat Vespel® wedge for 0 degree L-wave



HTPA on angled Vespel® wedge for 55 degree shear wave nominal

Ordering information

HTPA - FF - NE - PW - CC - T

- FF — Operation frequency: 2.5 = 2.5 MHz; 5 = 5 MHz; 7.5 = 7.5 MHz; 10 = 10 MHz
- NE — Number of elements: 16, 32, 64 or 128
- T — Max temperature rating: 200 = 200°C (390°F); 350 = 350°C (660°F)
- CC — Cable and connector: 3 or 5 (3- or 5-meter cable) + H = Hypertronics®; O = Omniscan®; S = Sonatest VEO®; Z = Zetec Topaz® or Zircon®
- PW — Pitch x element width: 1X5 = 1 mm pitch x 5 mm

e2sense offers standard and customized ultrasonic sensors to help you fulfill your inspection or monitoring application. Please contact us now at **info@e2Sense.com** to discuss your requirements.

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