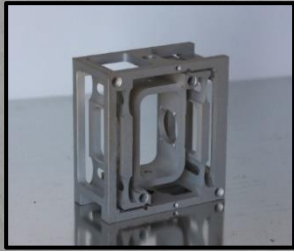


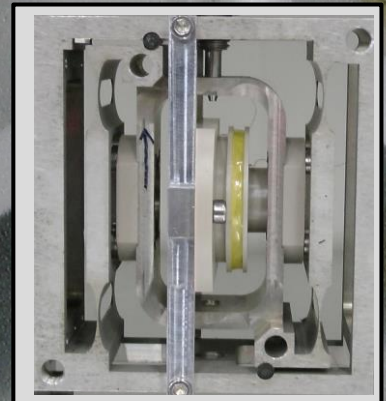
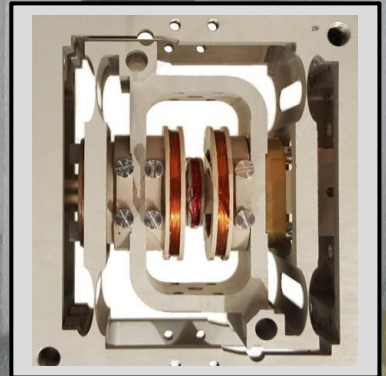
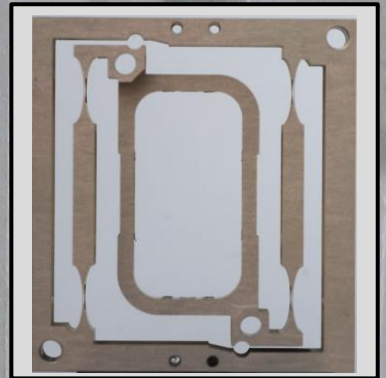
EX100 - High Q Tunable Mechanical Monolithic Horizontal Oscillator

Mechanical Monolithic Oscillator for Seismometers and Accelerometers



Mechanical Features

Bandwidth	DC - 100 Hz
Frequency Tuning	1 Hz - 20 Hz (tuning mass)
Sensitivity (vacuum)	Thermal Noise Limited
Quality Factor	$Q > 1.0 \times 10^3$ (air) - $Q > 4.0 \times 10^3$ (vacuum)
Environment	Standard, Harsh, Ultra-High Vacuum, Cryogenic
Readout Modules	Modular Mounting



Specifications

Architecture	Monolithic Folded Pendulum (Patented)	
Mass displacement	$\pm 3 \text{ mm} \pm 0.02 \text{ mm}$ maximum	
Suspension Joints	Elliptic Flexures (thickness 100 μm)	
Material	ERGAL (AI 7075-T6)	- Mod. EA100
	ANTICORODAL (AI 6082-T6)	- Mod. EB100
Dimensions	85 (H) x 77.5 (L) x 40 (P) mm	
Weight	200 g (without readout system)	

ADVANCED SCIENTIFIC SENSORS AND SYSTEMS



