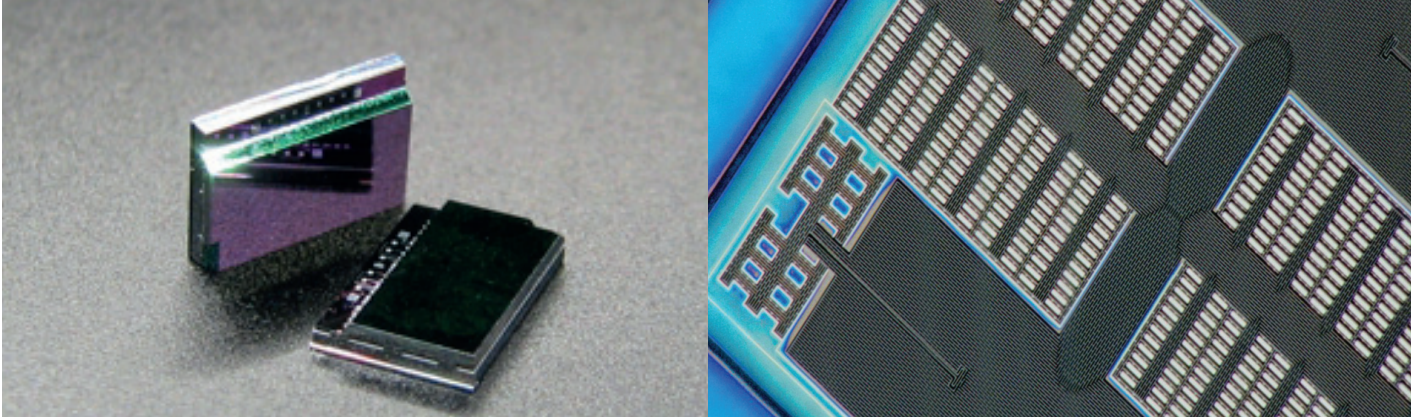


HIGH PRECISION ± 10° INCLINATION SENSOR



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Photo acknowledgments:

Fraunhofer ENAS, ZfM

All information contained in this datasheet is preliminary and subject to change. Furthermore, the described systems, materials and processes are not commercial products.

Features

- Single crystal silicon based
- 2-axis inclination measurement (x and y)
- Ultra low cross axis sensitivity due to HARMS technology
- Over damped frequency response
- Low noise
- Excellent stability over temperature
- Excellent reliability against overload
- No sticking due to entire dry processing

Application

- ASTROSE® project – sensor network for condition monitoring of power lines
- Geoengineering
- Leveling instruments
- Platform control and stabilization

Description	Condition	Typical	Unit
Measurement range		± 10	°
Frequency response	- 3 dB	35	Hz
Capacitive sensitivity		4.0	fF/mg
Full scale capacitive sensitivity		± 700	fF
Noise performance	MEMS element	3.9	µg/√Hz
Resolution	measured in combination with 12 bit readout circuit	< 0.01	°
Non-linearity		0.5	%
Cross-axis sensitivity		700 to 1	
Sensitivity temperature dependency	without temperature compensation	0 ... 120	ppm/K
Dimensions	L x W	5 x 3.5	mm