# Ultra-high sensitivity and stability, low-power MEMS accelerometer

*Introducing a novel MEMS inertial sensor for navigation geophysics and monitoring, with world record performance.*

INNOSEIS
SENSOR TECHNOLOGIES

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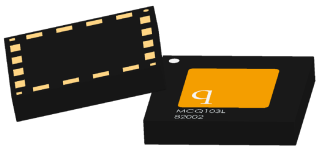
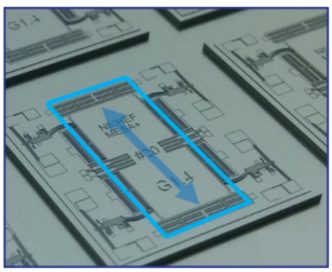
**Sensitivity and stability**
Patented sensor design allows for world record performance

**Low power**
High performance operation is achieved without power demands

**Competitive pricing**
Standardized and volume production techniques



*The Graviton high precision single axis MEMS accelerometer*



*Patented MEMS technology*

## Single axis technical specifications:

| | GRAVITON-010 | GRAVITON-200 |
|---|---|---|
| Input range | ± 0.1 g | ± 2 g |
| Bias – Stability (1 hr) | < 0.05 µg | < 0.1 µg |
| – Repeatability (ON/OFF, Shock) | < 10 µg | |
| – Thermal sensitivity | < 100 µg/K | |
| Scale factor | 1500 mV/g | |
| – Repeatability | < 80 ppm | |
| – Thermal sensitivity | < 1000 ppm/K | |
| Intrinsic noise<br>– In band 0 – 10 Hz<br>– In band 10 – 100 Hz | 2 ng/√Hz<br>10 $ng_{rms}$<br>20 $ng_{rms}$ | 40 ng/√Hz<br>150 $ng_{rms}$<br>570 $ng_{rms}$ |
| Bandwidth | 100 Hz | 200 Hz |
| Operating temp. range | -40 to +80 ºC (extended range available) | |
| Quiescent current | 15 mA | 6 mA |
| Quiescent power | 50 mW | 20 mW |
| Electrical interface | Digital | |
| Input voltage | 3.3 V | |
| Weight | 1.5 grams | |
| Dimensions | 9 x 9 x 3 mm | |

## About Innoseis Sensor Technologies

Innoseis Sensor Technologies is a spinout company from the National Institute for Sub-atomic Physics in the Netherlands. Its mission is to commercialize technology arising from the fundamental physics research into gravitational wave detection. Working with partners such as Shell and ESA, it has developed cutting-edge sensing technology that has significantly improved inertial sensing in terms of performance and cost.