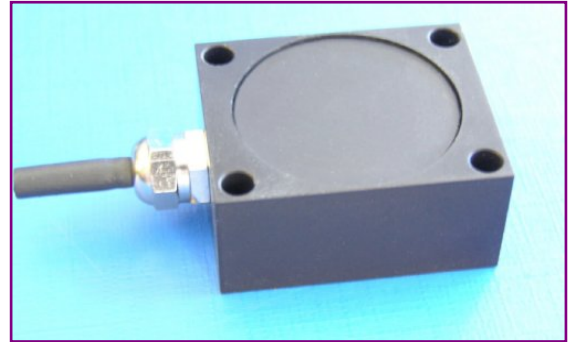


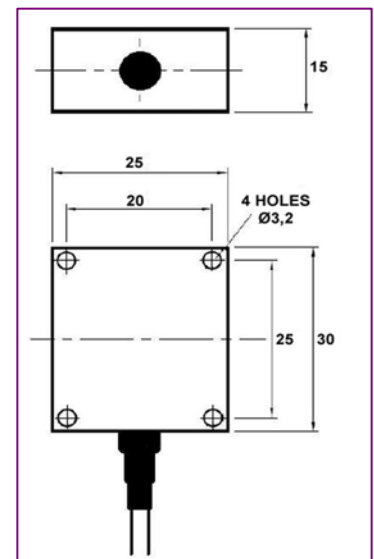
- * **Low Cost**
- * **Miniature Size**
- * **Over-range 4,000 g**
- * **Bandwidth 1,500 Hz**
- * **Rugged IP65 Design**
- * **1 or 2 Axes of Measurement**
- * **Resonant Frequency 5,000 Hz**
- * **Full Scale Ranges ± 2 g to ± 225 g**
- * **Lightweight Aluminium Alloy Construction**
- * **Operating Temperature Range -55° to $+125^{\circ}$ C**
- * **MEMS-based Silicon Capacitive Technology**
- * **High Level Output Option with Integrated Amplifier**



The **CTA001** is a rugged, high specification yet low cost accelerometer using state-of-the-art MEMS technology that was designed with the motor sports industry in mind, although it has many other applications in industry and R & D. Determinations of true dynamics are possible due to this sensor's ability to measure both static (DC) and dynamic accelerations.

The sensing element is a fully temperature-compensated, high stability, micro-machined silicon device. **CTA001** accelerometers are packaged in a rugged aluminium alloy case designed for easy mounting.

The **CTA001** Series is optionally available as the **CTA001A** with built-in amplifier modules, providing integral signal conditioning. Alternatively, Celsum Technologies Ltd supply a range of signal conditioning instruments, digital, analogue and radio telemetry.



Model	No of Axes n =	Range (\pm g)	Supply (V)	Offset (V)	Sensitivity (V \pm 10%)	Bandwidth (Hz)	Noise (mg/ \sqrt Hz)
2g - n - s	1 or 2	2	s = 5 (5V)	1.5	$\pm 0,5$	1,500	0.30
5g - n - s	1 or 2	5		2.5	± 1.4	1,500	0.25
15g - n - s	1 or 2	15		2.5	± 1.8	1,500	0.32
33g - n - s	1 or 2	33	s = 12 (8 - 16V)	2.5	± 1.8	400	3.0
50g - n - s	1 or 2	50		2.5	± 1.8	400	3.0
100g - 1 - s	1	100		2.5	± 1.8	400	10.0
225g - 1 - s	1	225		2.5	± 1.8	400	15.0

Ranges: $\pm 2, 5, 15, 33, 50, 100, 225$ g
Linearity: $<\pm 0.3\%$ Full Scale
Cable: 1m, 55spec+DR25+boot
Output: 0.5-4.5V or 4-20mA
Construction: Anodized aluminium
Storage Temperature: -55 to $+150^{\circ}$ C
Environmental: IP65
Weight: <30 grams without cable

Overrange: 4,000g
Cross-axis sensitivity: $<\pm 2\%$ Full Scale
 ($<\pm 5\%$ for >33 g)
Resonant Frequency: 5,000 Hz
Operating Temperature: -55 to $+125^{\circ}$ C
Compensated Temperature: -20 to $+70^{\circ}$ C
Temp effect on zero: $<\pm 0.03\%$ FS/ $^{\circ}$ C
Temp effect on sensitivity: $<\pm 0.02\%$ of reading/ $^{\circ}$ C



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