

UART Series MEMS Inclinometer

The 2GIG UART pitch and roll sensor is engineered to work for all applications. Our internal software provides unlimited programming capabilities that allow us to provide one of the easiest to use sensors on the market.



ENGINEERED TO PERFORM
AT EVERY LEVEL

ADAPTIVE SENSING TECHNOLOGY

| STABILITY |

Combination of a 3-axis Accelerometer and 3-axis Gyroscope provides excellent stability under extreme environments

| FILTER |

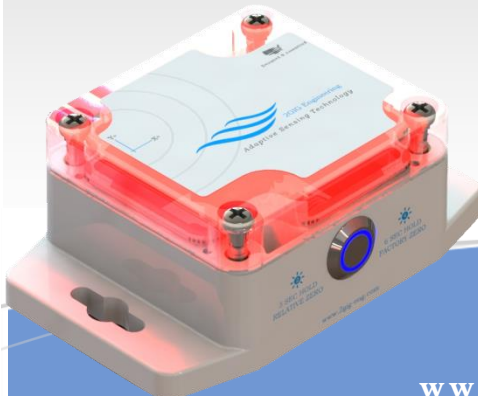
Custom filter using an advanced Kalman-based sensor fusion algorithm

| RELIABILITY |

Polycarbonate enclosure with an epoxy encapsulated PCB allow this sensor to withstand extremes

| ACCURACY |

Excellent dynamic accuracy for challenging conditions.



>Our UART (TTL) tilt sensor is the number one solution for any embedded angular measurement application. Whether it's a hobbyist's breadboard project or an integrated system with a microcontroller (MCU), the UART (TTL) inclinometer is designed to be the perfect fit-and-forget solution.

- 0.1° of Accuracy with 0.01° Resolution
- Temperature Compensated
- Single Axis Measurement Range up to $\pm 180^\circ$
- Dual Axis Measurement Range up to $\pm 90^\circ$
- Horizontal or Vertical Mount Options
- Outputs easy-to-read, UART ASCII messages
- 5V or 3.3V Logic Level Communication
- Relative Zeroing via Button or UART Command
- Adjustable baud rate and output rate (up to 100 Hz)

>Rugged and robust design built with materials chosen for their ability to survive the harshest of environments and operating conditions. Featuring an anti-fungal housing with a protection class rating of IP67, these inclinometers are guaranteed to work with the highest accuracy in any industrial condition.

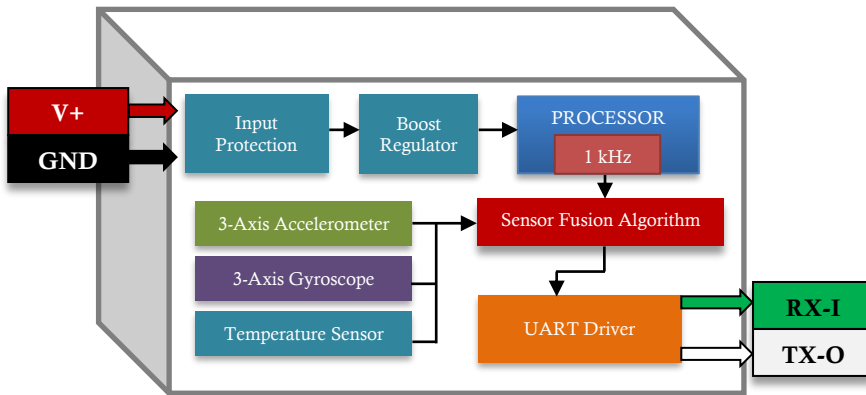
>Flexible lead times and top notch customer service allows us to put a 2GIG inclinometer in your hands when you need it. Our rapid communication and "on demand" supply method eliminates long lead times and ensures every customer is treated as the highest priority.

www.2gig-eng.com

| 194 Main Road, Abbot, Maine USA 04406 | 207.876.4800



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Input Protection Circuitry

- Reverse Polarity Protected
- Overvoltage Protected up to 60VDC
- CE Compliant Protection – Resists surges up to 500V and 250A

Boost Regulator

The boost regulator is a unique boost/buck switching regulator, which will maintain the UART voltage levels even if the input voltage drops below 5v.

Sensor Fusion Algorithm

Our advanced algorithm provides excellent dynamic accuracy for high vibe and high acceleration conditions.

UART Driver

The sensor fusion algorithm readings are sent directly from the inclinometer's MCU in the form of UART (TTL) messages. This format allows the user to receive the readings via an Arduino or similar MCU.

LEVELING THE WORLD

The UART Inclinometer has a wide array of uses. Our team of engineers can work with you in order to create the sensor that fits your application. Whether its legacy units, drop-in replacements, or new applications, 2GIG can provide the correct settings for your application.

AERIAL LIFTS



CONSTRUCTION



MARINE



AUTOMATION



AGRICULTURE



INDUSTRIAL



Customize your inclinometer

- Alternative enclosures / OEM PCB
- Wiring or connector options
- Custom protocols available
- Use as a receiver with our wireless transmitters
- Pair with our HMI's

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