Three - Axis Accelerometer



TILT – 05





Specifications	
Power source	3.3 – 17 VDC
Measuring range	±90° (two-dimensional)
Resolution	0.1° 1 mg
Accuracy	0.2° (Typical), 0.4° (Maximum
	error in full range)
Zero offset error ¹	< ±0.1° (@20°C)²,
	Maximum offset drift: ±0.011°
	/°C
Repeatability	< 0.1°
Accelerometer range	±2 g/±4 g selectable
Sensor Bandwidth	200 Hz
Baud rate	2.4kbps – 460.8kbps selectable,
	default: 115.2kbps
Data format	ASCII, port settings: 1 start bit, 8
	data bits, 1 stop bit & no parity
Output data rate	1, 2, 5, 10, 20, 25, 40, 50 and
	100 Hz selectable
LED indicators	Data transmission rate
	Flashing at current data rate
Power consumption	< 8 mA @ data rate <10Hz
(@ 5 V)	15mA @ maximum data rate
GUI software	WinCTi-Tilt [®]
Serial interface	3.3V TTL UART
Temperature sensor	1°C
resolution	
Operating Temperature	-40°C to +85°C (-40°F to +185°F)

Warranty: This product has 18 months limited warranty. For more information, please visit:

www.CTiSensors.com/warranty

This product is entirely designed and manufactured in the U.S.A.

Features

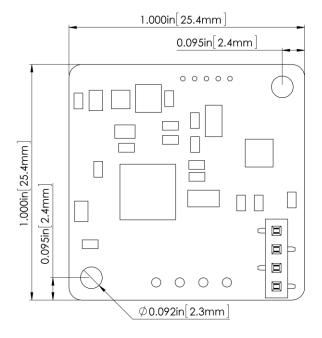
- Measuring range two-dimensional: ±90°
- High accuracy: err. < 0.2°
- High resolution: 0.1° | 1 mg
- Three-axis accelerometer
- Low power consumption: <8 mA (@ 5 V)
- Full duplex UART communication, 3.3 V TTL
- Small size: 1"x 1" (25.4 x 25.4 mm)
- Low cost (\$25 each for 1000 pcs)

Applications

- Platform control, alignment, and stabilization
- Solar panel tracking and control systems
- Tilt sensing and leveling
- Telescopic and scissor platform monitoring
- Motion/position measurement
- Navigation and GPS compensation
- Robotic position sensing
- Agricultural and industrial vehicle tilt monitoring

Accessories	
GUI Software	WinCTi-Tilt®

Dimensional Drawing



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All contents of this document are subject to change without any notice.

¹ Zero g offset can be easily corrected and saved by user.

² Units can be calibrated between -40°C and +85°C on request.