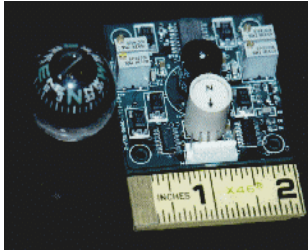


KuSaBa Engineers Pvt. Ltd.

EZ-COMPASS-EDU

Compass / Dual Tilt Axis Educational System



This advanced educational HEADING and DUAL TILT AXIS system is built around a customized state of the art CMOS SMT and Feed Through components. A 2" x 2" assembled PCB has a total height including sensing elements of less than an inch. The unit provides continuous heading and tilt information over the standard RS-232 interface.

The AZIMUTH is generated by a rotational core 2 axis magnetometer from a combination of SIN and COS of the heading angle with an interpolated 1-degree accuracy when leveled in a magnetic field free of anomalies. The tilt information is available with 12 Bit resolution and includes adjustable GAIN for both tilt axis in order to reach tilt range of almost ± 90 arcdeg.

This LOW cost COMPASS/TILT module is perfectly suitable for numerous educational navigation, educational research, training, construction, entertainment and other low cost navigation, orientation and leveling applications. If required, this module is capable of operating with any dual axis electrolytic tilt sensor. FREE Demo software facilitates custom module calibration, data acquisition, data averaging, and storage to a standard spreadsheet format and includes "SOFT NORTH".

Parameter	Specification	Units/description
Azimuth Range	360	deg, continuous
Pitch Range	+70 to -70	Arcdeg, near linear
Roll Range	+70 to -70	Arcdeg, near linear
Azimuth Resolution	1	Arcdeg sec, interpolated
Tilt Resolution	12	bits, full scale, both axis
Azimuth Repeatability	< 1	Arcdeg, typical
Tilt Repeatability	<2;	Bits
Communication	19200 baud, 8,N, 1	RS-232 standard
Supply	5 to 18	Vdc, 9Vdc battery typical
Temperature	-20 to +60°C	deg C
Size	2"L x 2"W	PCB Board

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