



KuSaBa Engineers Pvt. Ltd.



EZ-PROBE
EZ-COMPASS-3-V / MAGNETOMETER
Tilt Compensated Compass / Linear Dual Axis Tilt System
Waterproof Vertical Geophysical version



Low cost advanced Compass Probe includes Pitch / Roll / Temperature compensated COMPASS / MAGNETOMETER system built around a state of the art CMOS micro controller utilizing AOSI's proprietary algorithm on a thin 7" long assembly that is installed into a 1.25" diameter Garolyte tube or Aluminum housing with an industrial connector. The unit is sealed and potted and is ready to be used in a splash proof or shallow water applications. The unit outputs continuous heading, magnetic field, and dual axis tilt and temperature data over the standard RS-232 and RS-422 interfaces. The AZIMUTH is generated from a 3 axis semiconductor magnetometer with 12 bit (0.08 deg) resolution. The LINEAR tilt information is available with 12 bit resolution for almost +-80arcdeg. COMPASS/TILT module is perfectly suitable for numerous rock drilling, oil drilling, hole profiling, logging, marine array, navigation, research, training, construction, entertainment and other precision orientation, navigation and leveling applications. The COMPASS is able to output multi-sensor information in NMEA-0183 mode and responds to numerous generally used commands. Easy link through the Hyper Terminal Windows accessory facilitates custom calibration, hard iron compensation, data acquisition, data averaging, scan delay, dumping factor and data display.

Parameter	Specification	Units/description
Azimuth Range	0—360	deg, continuous
Azimuth Resolution	12 (0.08)	bit (deg)
Azimuth Repeatability	< 0.25	deg, typical horizontal
Azimuth Accuracy	< 0.5	deg, typical horizontal
Magnetic Field	+2	Gauss typical
Magnetic Resolution	< 1	mGauss typical
Pitch Range	+70 to -70	arcdeg linear
Roll Range	+70 to -70	arcdeg linear
Pitch Range	+80 to -80	arcdeg near-linear
Roll Range	+80 to -80	arcdeg near-linear
Tilt Resolution	12	bit full scale, both axis
Tilt Repeatability	<2;	Bits
Temperature	-30 to +85	deg C
Communication	300--38400 baud,8,N,1	RS-232 and RS-422 standards
Supply	5 +-1%	Vdc well regulated
Size	1.25"diam x 8.5"Long	OD assembly

26, Amar Society, Gulmohar Path, Off Law College Road, Erandawane, Pune – 411 004,
PHONE: +91 –20 – 25464818, 25433879,25431293, FAX: +91 – 20 25446759.
Email: info@kusabaengrs.com, WEB – www.kusabaengrs.com