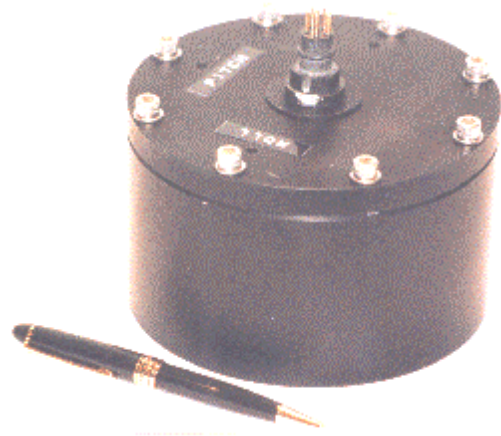
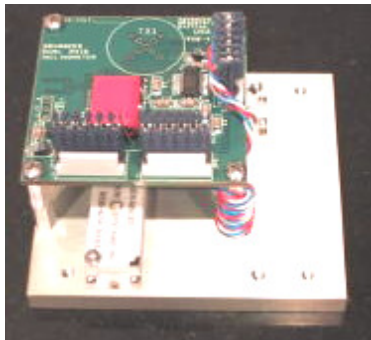
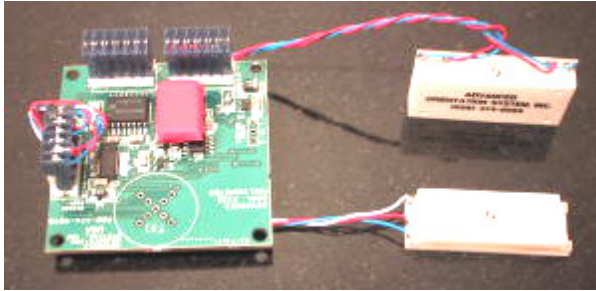




## KuSaBa Engineers Pvt. Ltd.

### **EZ-PLM-5 / EZ-TILT-5000-NULL / EZ-TILT-5000-5VIB / EZ - TILT-5000-15VIB ANALOG-DIGITAL-PWM-ALARMS Linear Dual Axis Tilt Systems**



EZ-TILT-5000, advanced programmable dual/single axis LINEAR Analog/Digital output tilt module, is built around a customized state of the art CMOS Microprocessor. A 2"x 2" assembled PCB provides concurrent Analog, PWM and RS-232 inclination information in two axis of tilt. The module is fully temperature compensated for NULL and GAIN. The system includes full range linearity correction for each axis of tilt and two software adjustable threshold detectors, one for each axis. The module uses any two sensor combination of either SX-003D-NULL, SX-003D-NULL-L or SX-xxxD-VIB single axis inclination sensors and provides an economical and reliable tilt sensing solution for applications requiring superior Nulling capabilities with concurrent excellent

LINEARITY, resolution, repeatability and symmetry. Rugged hermetic construction and MIL-SPEC temperature range make these sensors perfectly suitable for numerous high precision OEM, military, medical, optical, automotive, range finder, alignment, automation, robotics and construction angle measurement applications. The EZ-TILT-5000 also includes two fully programmable level threshold detector lines that allow the user to set level sensitive alarms for pitch and roll. Innovative design, four set screw holes and small size facilitate uncomplicated mounting. The system can be easily supplied with two different tilt sensors. This rare option lets users solve special applications when one axis requires high tilt range while the other one requires high resolution. Sensors could be remotely located and calibrated to different ranges if so required. Both Analog and PWM outputs are fully software programmable and are updated each read cycle for each enabled axis. The analog output range is top limited by 4Vdc and bottom limited by 1Vdc for the full set angular range. The PWM will output 10% to 90% duty cycle for the set angular range at base frequency of 37Hz. Exceptionally stable and consistent performance in temperature variable environments and it's LOW cost make EZ-TILT-5000 the perfect choice for high accuracy leveling applications. In addition to digital filtering the electrolyte may be modified to mechanically filter out errors induced by shock & vibration. Test data could be supplied on 3.5" disk upon special request. The module is able to operate in a stand-alone mode with a 4 line x 20 character serial LCD display. The EZ-PLM-5 NULLING module is provided on an Aluminum platform calibrated to the bottom surface.

Specification	EZ-TILT-5000-NULL (EZ-PLM-5)	EZ-TILT-5000-5VIB	EZ-TILT-5000-15VIB	Comments/Units
RS232 Output	-3 to +3 max	-5 to +5 linear	-15 to +15 monotonous.	arcdeg
Analog Output	-3 to +3 max	-5 to +5 max	-12 to +12 max	1--4 Vdc p-p total span
Analog Output span	+/-1.5Vdc	+/-1.5Vdc	+/-1.5Vdc	@2.5Vdc reference
PWM Output	-3 to +3 max	-5 to +5 max	-15 to 15 max	arcdeg( 10%--90% @ 37Hz )
Resolution	12	12	12	bits on each range
Repeatability	2	2	2	bits typical
Linearity	<0.2% @ 0.5°	<0.2% @ 5°	<0.3% @ 12°	CCW & CW typical
Symmetry	<0.2% @ 0.5°	<0.2% @ 5°	<0.2% @ 12°	CCW & CW typical
Power	28mA	28mA	28mA	@5Vdc supply
RS232	37Kbps-300,8.1,N	37Kbps-300,8.1,N	37Kbps-300,8.1,N	19.2Kbs default
Temperature	-55 to +125	-55 to +125	-55 to +125	deg C operational sensor only #
Temperature	-55 to +125	-55 to +125	-55 to +125	deg C storage sensor only #

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