



T F M 100S SPACECRAFT ATTITUDE CONTROL TRIAXIAL FLUXGATE MAGNETOMETER



MAY 2005 SPECIFICATIONS

PARAMETER	TFM100S
Radiation Tolerance	>306kRADs (with 1.59 mm cover)
	>50 kRADs (with .79 mm cover) (Option)
Axial Alignment (Orthogonality)	better than $\pm 1^\circ$; $\pm 0.5^\circ$ special; calibration data provided to $\pm 0.1^\circ$
Input Voltage	+ 15 to + 45 VDC
	+45 to +125 VDC (Option)
Input Current	20 mA @ 28 Volts
Isolation	between power and signal ground >200 M Ω @ 500 VDC
Field Measurement Range	$\pm 100,000$ nT
	Other on request
Accuracy	$\pm 0.5\%$ of full scale
Linearity	.015% of full scale
Sensitivity	100 μ V/nT
Scale Factor Temperature Shift	.0075% full scale/ $^\circ$ Celsius
Output Ripple	3 mV peak to peak @ 2nd harmonic
Analog Output @ Zero Field	± 0.025 volt
Zero Shift with Temperature	≤ 1.0 nT / $^\circ$ Celsius
Susceptibility to Perming	± 25 nT shift with ± 5 Gauss applied
Output Impedance	332 $\Omega \pm 5\%$
Frequency Response	- 3 dB @ > 150 Hz
E M I	CEO1, CEO3, REO2, CSO1, CSO2, CSO6, RSO1, RSO2, RS03
Random Vibration	20G RMS (20 Hz to 2 KHz)
Shock	>230G
Temperature Range	- 40 $^\circ$ to +85 $^\circ$ Celsius operating
Weight	200 grams (1.59 mm cover)
	166 grams (.79 mm cover) (Option)
Size	3.66 cm x 3.58 cm x 15.44 cm
Connector (chassis mounted)	9 pin male "D" type gold-plated, mil-spec, non-magnetic