

BILLINGSLEY AEROSPACE & DEFENSE

TFM65-VQS

ULTRA MINIATURE FLIGHT MAGNETOMETER



FEBRUARY 2008 SPECIFICATIONS

Axial Alignment:	Orthogonality better than $\pm 1^\circ$
Input Voltage Options:	20 - 34 VDC
Input Current:	≈ 18 mA @ 28 VDC in – Constant Power Power and Signal Lines Galvanically Isolated
Field Measurement Range:	± 60 μ T = ± 6.0 V (Other Options Available)
Accuracy:	$\pm 0.5\%$ of Full Scale
Linearity:	$\pm 0.003\%$ of Full Scale, Typical < $\pm 0.001\%$
Sensitivity:	100 μ V/nT (TFM100G4-S)
Scale Factor Temperature Shift:	0.002% Full Scale/ $^\circ$ C
Noise:	<35 pT RMS/ Hz @1 Hz, Typical < 20 pT
Output Ripple:	3 μ V Peak to Peak at 2 nd Harmonic
Analog Output @ Zero Field:	± 0.005 V
Zero Shift with Temperature:	± 0.2 nT/ $^\circ$ C / < 0.05 nT/ $^\circ$ C (Special)
Susceptibility to Perming:	± 20 nT shift with ± 5 Gauss Applied
Output Impedance:	332 Ω $\pm 5\%$ (Can Drive > 3500' of Cable)
Frequency Response:	3 dB @ ≥ 3.5 kHz (Can be rolled off to lower frequency.)
Over Load Recovery:	± 5 Gauss slew < 2 milliseconds
Sensor Type:	Vacquier – Immune to Crossfield Effects
EMI:	Designed to meet CEO1, CEO3, REO2, CSO1, CSO2, CSO6, RSO1, RSO2, RSO3
Random Vibration:	> 23G RMS 20 Hz to 2 KHz
Temperature Range:	- 55 $^\circ$ to + 80 $^\circ$ Celsius operating
Acceleration:	> 60G
Radiation Hardened:	> 200 kRADs
Weight:	117 g
Size:	3.51 cm x 3.23 cm x 8.26 cm
Connector:	9 PIN MALE "D" TYPE; Female Mating Connector Supplied

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