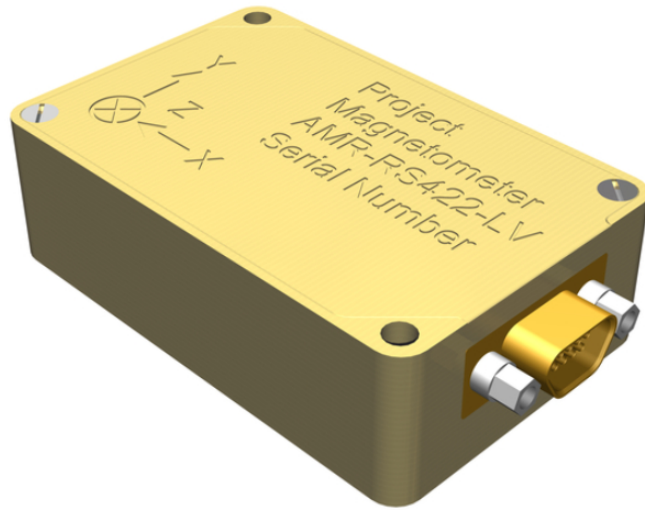


AMR MAGNETOMETER



The ZARM-Technik AMR Magnetometer is a microcontroller based Magnetometer, designed to measure the external magnetic field vector for satellite attitude determination and control. An integrated set of orthogonally arranged Anisotropic-Magneto-resistive (AMR) sensors is used to measure the magnetic field in all three directions, X, Y and Z.

Parameter	Digital AMR-MAG	Tolerance, remark
Number of Axes	Three, orthogonal	
Axial Alignment	$\leq 1^\circ$	
Field Measurement Range	$\pm 200 \mu\text{T}$	
Scale Factor / Sensitivity	10 nT / bit	The Sensor Sensitivity is 8.5 nT
Scale Factor Drift	$< 100 \text{ ppm} / ^\circ\text{C}$	
Zero Field Drift	$< \pm 5 \text{ nT} / ^\circ\text{C}$	
Zero Field Bias	$< \pm 350 \text{ nT}$	
Linearity	$< \pm 0.1\% (-100 \text{ to } +100 \mu\text{T})$	
Accuracy	$< \pm 1\% (-100 \text{ to } +100 \mu\text{T})$	
Sampling Rate	50, 100, 200 and 300 Hz	Software selectable
Output Rate	1 to 6 Measurements/Sec.	
Supply Voltage	+6 V to +16 V	
Interface-Communication	Serial: RS422	Full Duplex
Baudrate	19200 Baud	
Power Consumption	$< 0.3 \text{ W} @ 12 \text{ V}$	
Temperature Range	-30 °C to +60 °C	Operating
	-40 °C to +85 °C	Non-Operating
Dimensions	56 x 36 x 17 mm	
Mass	$\leq 60 \text{ g}$	Housing-thickness 3 mm
Connector	9pin female micro miniature (MDM)	
EEE Parts	CotS	No radiation data available