

Mag652

Ultra-low-power
Magnetic Event Sensor





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Ultra-low-power Magnetic Event Sensor

An ultra-low-power magnetic event sensor for use in remote, environmentally rugged locations, where battery power is essential.

The sensor is designed to trigger a voltage output when a magnetic field change of $>1\text{nT}$ is detected.



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Features

- Sensitivity $>1\text{nT}$
- Current consumption of less than $700\mu\text{A}$

Typical Applications

- Detection of vehicles
- Detection of personnel carrying metal equipment



Product Identification

Product name	Description
Mag652	Ultra-low-power magnetic event sensor

Specifications

Performance	
Number of axes	2
Trip detection threshold	1nT $\pm$ 25%
Full Scale Measuring Range	$\pm$ 60 μ T
Frequency Range (within -3dB)	0.1 to 5Hz
Excitation frequency	256Hz
Start-up/Settling time	<60s

Environmental	
Operating temperature range	-30 to +50°C
IP Rating	IP67
CE compliance	BS EN 61326 & RoHS



Mechanical

Enclosure Material	Die-Cast Aluminium; Painted Black
Dimensions (mm)	111 x 83 x 46
Weight	1.5m variant <600g 15m variant <800g
Connectors	TE Connectivity T4113002081-000 M12 Right-Angled Male 8-Way Connector Field Installable
Cable	1.5 and 15 metres
Cable Minimum Bend Radius	7.5 x OD (fixed)
Mounting Arrangements	None

Electrical

Supply Voltage	3.5V to 15V
Current Consumption Zero-Field Earth's Field	<350µA <700µA
Trip Output Voltage	3.3V W.R.T. to ground pin – no load
Trip Output Time	Duration of local field disturbance over 1nT
Analogue Output	N/A
Output Impedance	1KΩ



The specifications of the products described in this brochure are subject to change without prior notice.

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