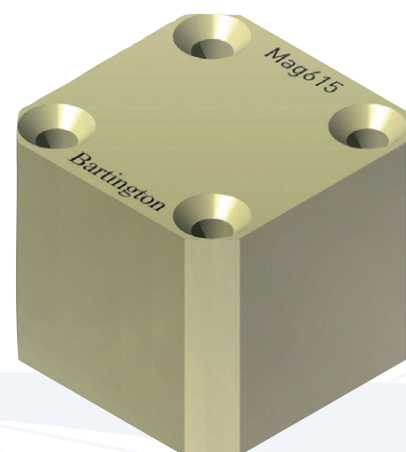
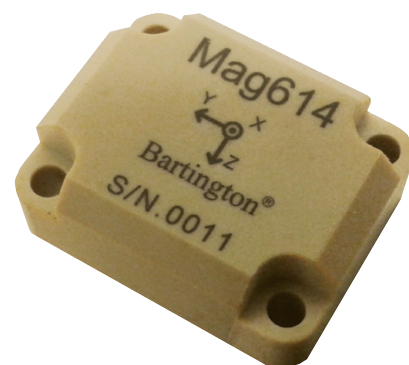


# Mag614 & Mag615 高温微型三维磁通门探头

These miniature probes operate to 175°C and are designed to survive high levels of shock and vibration. They are ideally suited for measurement while drilling (MWD) applications.

Ambient temperature electronics can be supplied in packaged and unpackaged versions, and a PCB schematic is also available.



## Features

- Compact probe heads for easy integration into other systems
- Dimensions: 25x10x20mm (Mag614) and 20x17x20mm (Mag615)
- Room temperature electronics and PCB schematic available
- Flying lead (Mag615)

## Typical applications

- Measurement while drilling (MWD)
- Applications requiring high shock and temperature resistance

# Mag614 & Mag615 技术参数

Performance		
	Mag614	Mag615
Number of axes	Three (right hand XYZ co-ordinate system)	
Polarity	+ve non-inverting when pointing North	
Output scaling (Note: value will depend on electronic drive and sense circuit used)	60 $\mu$ T / mA typical TBC	120 $\mu$ T / mA typical TBC
Scaling error	$\pm$ 5% at 25°C, $\pm$ 10% at 175°C	
Linearity error	0.005% (Least Squares Fit)	
Temperature coefficient of scaling	$\pm$ 0.015% FS range / °C max	
Frequency response	<5% amplitude error DC to 1kHz	
Frequency range	DC – 3 kHz minimum within 3dB level	
Measurement noise floor	<300 pTrms/ $\sqrt$ Hz at 1Hz across temperature range within 20 minutes of power applied	
Zero field offset	$\pm$ 500nT max. at 25°C, when scaled for 100 $\mu$ T range	
Temperature co-efficient of offset	$\pm$ 0.0005% FS range / °C max	
Orthogonality error between axes	<2° target	
Alignment error to enclosure side	<3° target	
Start-up / settling time	99% of final value in 0.5s	

Environmental	
Operating temperature range	-20°C to +175°C
Storage temperature range	-40°C to +175°C

Mechanical		
	Mag614	Mag615
Dimensions excl. cable (W x H x L)	25x10x20mm maximum	20x17x20mm maximum
Weight (approximate)	<30g	<30g
Connector (Mag614) / Pinning (Mag615)	2 rows of 4 off 0.6mm diameter pins, 2.54mm pitch, for through hole mounting to electronics PCB (not supplied)	
Cable (flying lead version only)	n/a	8 off PTFE wires colour coded
Mounting points available	4 off mounting holes M2.5	

电气性能 (每个轴)		
	Mag614	Mag615
Primary resistance	5.2 $\Omega$ $\pm$ 20%	10.4 $\Omega$ $\pm$ 20%
Primary inductance	130 $\mu$ H $\pm$ 20% TBC	260 $\mu$ H $\pm$ 20% TBC
Secondary resistance	27.4 $\Omega$ $\pm$ 20%	54.8 $\Omega$ $\pm$ 20%
Secondary inductance	1.2mH $\pm$ 20% TBC	2.4mH $\pm$ 20% TBC
Recommended primary coil drive current	4mA peak AC coupled	
Recommended excitation frequency	32kHz	16kHz