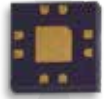


Graphene – Delivering superior magnetic sensing

Paragraf has pioneered mass production of graphene-based Hall effect sensors that leverage graphene's superior electron mobility, energy efficiency, and thermal robustness.

This results in a range of magnetic and current sensors that accurately map high and low magnetic fields in regular and extreme environments.



General purpose sensors

Our sensors offer magnetic field measurement resolution close to traditional sensors with the simplicity of a Hall sensor. Paragraf sensors provide high sensitivity and a strong linear response across a wide temperature range.



Encoders

Higher sensitivity, more flexible integration for high-performance encoders.



Inverters

Enhance inverter efficiency for optimal EV performance.



Batteries

Measure current flow in EV batteries, without direct circuit integration.

Cryogenic sensors

Our cryogenic-ready graphene-based sensors are the only Hall effect sensors capable of measuring magnetic field strengths from microTesla to 30 Tesla at extreme temperatures down to the millikelvin (mK) level.



Quantum Computing

Monitor unwanted fields, for reliable quantum computing.



Particle Accelerators

Ensure reliable operation in high magnetic fields.



Fusion

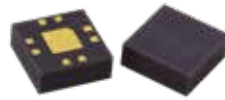
Characterise superconducting magnets in extreme environments.

Complete magnetic field measurement system



The MiST (Multi Sensor Test Unit) has been purpose built for our sensors, allowing easy tuning of data acquisition and signal processing.

The combination of the MiST and Paragraf's single- and 3-axis probes provide a turnkey solution for measuring and logging magnetic field fluctuations coming from up to four sensors at a time.



Graphene Hall sensors



3-axis probe (in dev) with 3 sensors

Specifications

Type	Sensing Range	Sensitivity (V/AT)	Sensitivity (V/VT)	Min. Temp	Max. Temp
General purpose (application specific)	$\mu\text{T} - 2 \text{ T}$	400 - 1,000 +	0.16 - 0.3	-55°C	125°C
Cryo - high field	$\pm 30 \text{ T}$	200	-	<1 K	350 K
Cryo	$\pm 7 \text{ T}$	300	-	4 K	350 K
Cryo - low field	$\pm 0.5 \text{ T}$	1,700	-	<1 K	350 K

Contact us

7-8 West Newlands, Somersham,
Cambridgeshire, PE28 3EB. UK

- sales@paragraf.com
- +44 (0)1223 739782
- www.paragraf.com
- store.paragraf.com

