

## Leveraging the graphene advantage for superior performance in magnetic sensing applications

Paragraf has pioneered the process of mass producing graphene-based electronics to create Hall effect sensors that harness graphene's superior electron mobility, energy efficiency and thermal robustness.

The result is a range of magnetic and current sensors that map high and low magnetic fields, with superior accuracy, in both extreme and ambient environments.



### General purpose sensor: M01

High-performance sensor with high sensitivity and a strongly linear response to magnetic fields and temperature.

### Cryogenic sensors: X01, X02, X03

Sensor range capable of measuring magnetic fields at temperature extremes at the mK level.

### High field sensors: M02, X01

Sensors designed for use in environments with magnetic fields up to 30 Tesla while maintaining a linear response.

## Evaluate our sensors with the Multi Sensor Test Unit



Paragraf's Multi Sensor Test Unit provides a self-contained, turn-key solution for the easy configuration and operation of multiple graphene Hall sensors.

The highly configurable data acquisition unit allows for the simultaneous acquisition and digitisation of magnetic field signals from four channels.

## Applications

Paragraf's technology delivers the unique properties of graphene into a range of magnetic field sensing applications.



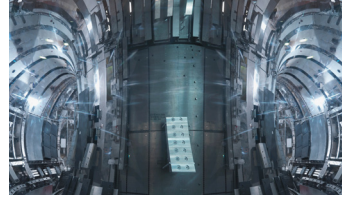
### Quantum Computing

Measure controlling magnets and potentially disruptive fields to allow for monitoring and correction of qubits, making quantum computing a reality.



### Particle Accelerators

Measure the high magnetic fields generated by the control magnets to allow for more reliable operation.



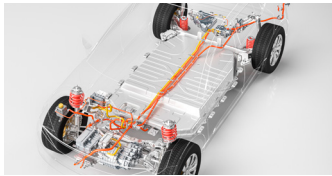
### Fusion

Enable critical understanding of the confinement magnets in truly extreme environments.



### Encoders

Higher-sensitivity magnetic sensing allows for more-flexible integration for high-performance encoders.



### Inverters

High inverter efficiency, critical for EV performance, can be enabled with improved magnetic sensor.



### Batteries

Measure of magnetic fields generated by the flow of current, without being part of the circuit.

## About Us

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Paragraf is the first company in the world to mass produce graphene-based electronic devices using standard semiconductor processes. Using our unique foundry capability, we bring to market differentiated graphene-based electronics as standard products, such as magnetic sensors and biosensors. We solve important problems in a range of applications, including automotive, industrial automation, cryogenics, healthcare and agri-tech.

