



## Compass Sensor Module

The OSEPP Compass Sensor Module is a 3-axis digital compass for low-field magnetic sensing. It utilizes the Honeywell HMC5883L state-of-the-art high resolution magneto-resistive sensors, an ASIC containing amplification, automatic degaussing strap drivers, offset cancellation, and a 12-bit ADC that enables a compass heading accuracy to within 1-2 degrees.

The module uses the I<sup>2</sup>C interface for data communication. The I<sup>2</sup>C lines are packaged with the power and ground lines into a modular connector, which allows easy plug and play operation. There are two connectors on the module to enable daisy chaining of multiple I<sup>2</sup>C devices together.

The OSEPP Compass Sensor Module is ideal for applications that require the measurement of both the direction and the magnitude of Earth's magnetic field, from milligauss to 8 gauss.

- Plug and play with OSEPP I<sup>2</sup>C Expansion Shield
- 12-Bit ADC with 2 milligauss field resolution in +/- 8 gauss field to enable 1-2 degree compass heading accuracy
- Fast 160 Hz maximum output rate
- Low power consumption
- Supports I<sup>2</sup>C interfacing with 7-bit address of 0x1E
- Provides pass-through connector to support daisy chaining of multiple sensors from the OSEPP Sensor Module family
- Provides 0.1" breakout points for power and I<sup>2</sup>C interface pins access



### Product Info

Stock Code	COMP-01
Description	Compass Sensor Module
Package Size	1

