WINGMAN

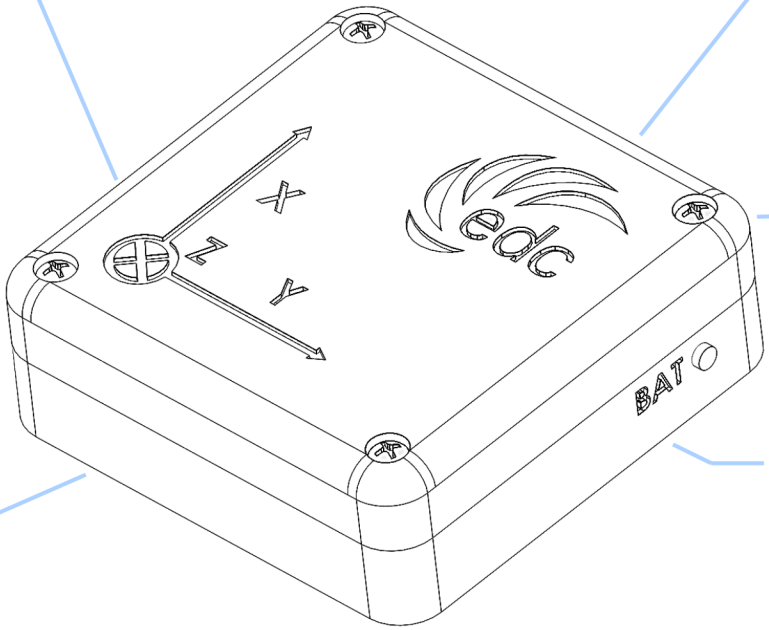
an earthlydynamics product

Understand Your System

Wingman is a data acquisition sensor built to ride along on a variety of vehicles and engineering prototypes. Perfect for testing and verification, it is a single sensor that integrates a high-g accelerometer, low-g accelerometer, gyroscope, magnetometer, barometer, and Global Navigation Satellite System (GNSS) into a single, small form factor. Wingman removes the requirement for multiple, disconnected data acquisition sensors that must be power cycled and time synchronized by centralizing the most commonly used sensors for testing and verification of real world hardware prototypes. Wingman has an accompanying desktop application that allows the user to adjust data rates for each sensor and process on-board logs. Whether it is for real world vehicles, packages, or payloads, Wingman is the perfect data collecting companion for your system.

Specifications

Operating Temperature	-40° F to 185° F
Impact Measurement	± 200g with ± 5g planned accuracy at 1-3 kHz
Accelerations	± 16g with higher precision for <1 kHz logging
Rotation Rates	Up to ± 2000 deg/s, up to 200 Hz
Pressure Altitude	Absolute accuracy within ± 6 ft up to 25 Hz
Magnetic Heading	Up to 80 Hz
GNSS for Ground Vehicles & Aircraft	5 ft position accuracy 0.16 ft/s velocity accuracy 5 Hz update rate
AHRS Orientation Estimation	Roll, Pitch, Yaw, Velocity



Onboard Data Logging

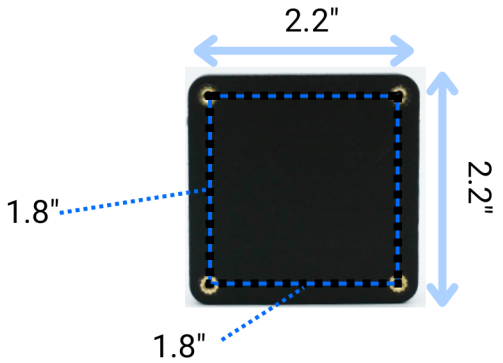
Access all of Wingman's logs over USB-C and manage your data through the desktop app

Built to Withstand Tough Conditions

Capable of enduring extreme temperatures from -40 °F to 185 °F and measure hard impacts of up to 200g in any direction

Easy to Mount

Attaching Wingman with the 1.8" x 1.8" hole pattern or provided mounting plate allows for a fast and easy integration onto a system



Desktop App Configurable

- Calibrate On-Board Sensors
- Configure Settings
- Real-time Data Streaming and Plotting
- Parsing and Plotting of On-Board Data

Dimensions 2.2" x 2.2" x 0.75"

Battery Life 3-5 hours

Weight 2.5 oz

Email: wingman@earthlydynamics.com
Website: earthlydynamics.com/wingman

*We cannot guarantee that all data rates can be obtained simultaneously