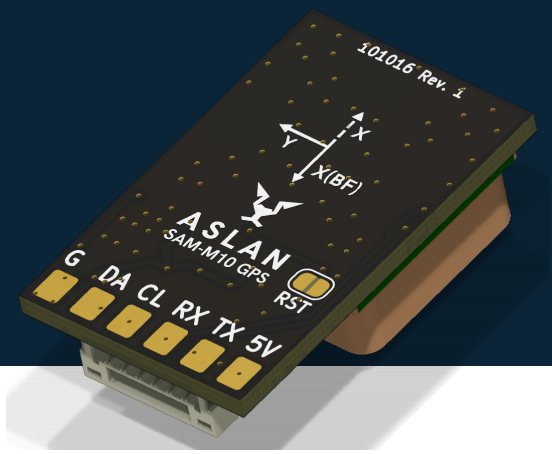
NAVIGATION · GNSS + MAGNETOMETER

Aslan **SAM-M10 GPS Module**

A compact multi-constellation GNSS module with an integrated magnetometer and ceramic antenna, on the Pixhawk standard pinout.



u-blox M10	LIS2MDL	18 × 29.1 mm	8 g
GNSS RECEIVER	MAGNETOMETER	FOOTPRINT	MODULE WEIGHT

DESIGN INTENT

Positioning hardware should be the least interesting part of an integration. The SAM-M10 keeps the antenna, receiver, magnetometer, and filtering on one small board with a standard pinout, so it drops into a small UAS, a ground robot, or a build-and-fly course without custom harnesses or firmware detective work. NDAA compliant and manufactured in the USA.

CORE SYSTEM

- **u-blox M10-series** GNSS receiver with multi-constellation support for improved availability and accuracy
- **ST LIS2MDL** magnetometer for heading reference
- **Integrated ceramic antenna**: no external antenna to mount, route, or shear off
- Orientation markings on the board face for unambiguous installation

POWER & SIGNAL INTEGRITY

- Dedicated power filtering reduces susceptibility to electrical noise from nearby ESCs and VTX hardware
- Designed to run from flight-controller-supplied rails without additional regulation
- Clean signal routing for consistent GNSS performance under dynamic load
- Onboard backup battery preserves acquisition data for **several days** between flights

INTERFACES & INTEGRATION

- **Pixhawk standard pinout**: compatible harnesses are already in the field, so no custom cabling is needed
- **UART** interface for GNSS data output
- **I²C** interface for the magnetometer
- Compatible with **Betaflight, ArduPilot, and PX4**

BUILT FOR

- Small UAS and robots where mass and volume budgets are measured in grams and millimetres
- Cost-sensitive fleets that need consistent positioning without a premium antenna stack
- FPV build-and-fly instruction, where wiring mistakes cost class time
- **NDAA compliant**, manufactured in the United States

SPECIFICATIONS

SKU **101067** · RETAIL **$69.84 / ea.**

RECEIVER	u-blox M10-series GNSS
CONSTELLATIONS	Multi-constellation
MAGNETOMETER	ST LIS2MDL
ANTENNA	Integrated ceramic
PINOUT	Pixhawk standard
DATA INTERFACE	UART (GNSS) · I²C (mag)
FIRMWARE SUPPORT	Betaflight / ArduPilot / PX4
BACKUP POWER	Onboard battery, several days
SUPPLY	Flight-controller rails
SIZE	18 × 29.1 mm
WEIGHT	8 g
COMPLIANCE	NDAA compliant · U.S. built

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