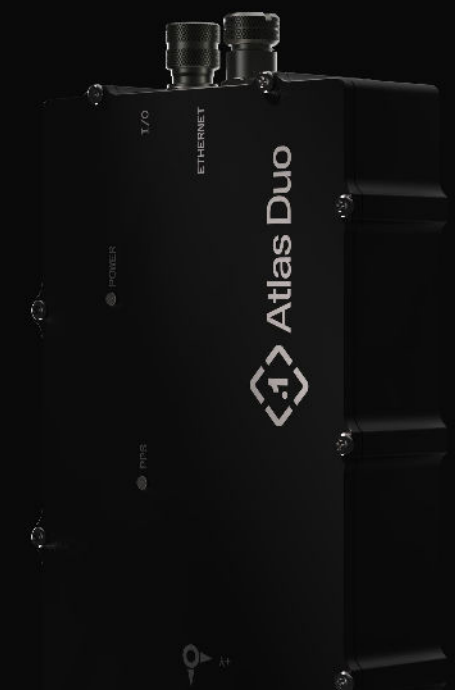


Atlas Duo INS

Point One Navigation's Atlas Duo INS is a standalone inertial navigation reference system delivering our highest precision positioning with dual antennas for static heading and a weather-proof rugged chassis for harsh outdoor environments.

FEATURES

Multifrequency Dual Antenna
High Precision GNSS Receiver with dual antenna inputs

Automotive grade (ASIL-B) IMU with 6 Axis Gyro / Accelerometer

100Hz Position Update Rate with 6DOF output over Ethernet

Embedded ARM Processor
1.8GHz Quad Cortex A-53

Multi frequency GNSS antenna with mag-mount, RF and weather-proof Ethernet cabling

CAN and wheel encoder vehicle odometry inputs (optional)

Configurable IO including PPS GPIO and Giagbit Ethernet

Hosted UI and REST API control interface

CNC Aluminum Chassis with weather-proof connectors

BENEFITS

Access to Point One RTK network, the industry's highest performance GNSS cloud RTK correction service

IP67 rated for rugged protection from water and dust

Dual Static Heading for automatic calibration and continuous accuracy

Tightly coupled sensor fusion with integrated positioning engine software to achieve centimeter-level accuracy

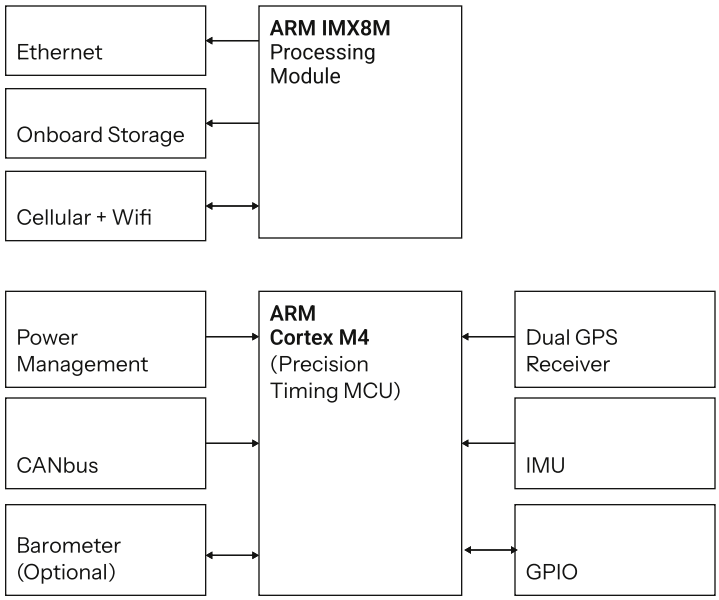
Simple plug-and-play setup with remote access configuration, control, and data logging

Schematics available for rapid integration into customer platforms

sales@pointonenav.com
pointonenav.com

ELECTRICAL

Input Voltage	5 – 48 VDC
Power (Typical)	3 Watts (non cellular)
Connections	Power, Ethernet, CAN, GPIO GPS RF (2x), Cellular (2x), Wifi
Configurable GPIO	Programmable time locked pulse generator (2 channels) or singular wheel tick input



PERFORMANCE

Open Sky	<10 cm, 1-sigma accuracy; 1 m PL, TIR = 10-7, availability = 99%
Urban	<30 cm, 1-sigma accuracy; 3 m PL, TIR = 10-7, availability =99%

MECHANICAL

Dimensions	222 mm x 124 mm x 30mm
Enclosure	IP67
Weight	2.3 lbs
Storage	-40° C to +85° C (95% RH)
Operation	0° C to + 60° C (90% RH)
Vibration	TBD
Supports	1000BASE-T (Gigabit Ethernet) and 100BASE-TX

SUPPORT

GitHub	github.com/PointOneNav
Documents	pointonenav.com/docs/

NAVIGATION SPEC

Signal Tracking (Per Antenna)
GPS L1C/A, GLONASS G1, BeiDou B1-I, B1-C Galileo E1
GPS L2P codeless, L2C, GLONASS G2, BeiDou B2-
GPS L5, BeiDou B2a, Galileo E5a, BeiDou B3, Navic L5
QZSS, EGNOS, WAAS, GAGAN, MSAS, SDCM
Inertial
+/- 125 degrees/sec, +/- 6 g
Outputs
NMEA 0183 over Ethernet, Point One Fusion Engine open source library
Position Update 100 Hz
Dead Reckoning < 1.5 meters error over 10 minutes*
Static Heading 0.15° @ 1m, 0.03° @ 5m**

* Performance measured as typical with in-vehicle calibration and vehicle wheel speeds
** Specification is in open sky, RMS values independent of antenna/body calibration

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