

VN-110 IMU/AHRS

Rugged and Miniature Tactical-Grade IMU and AHRS

Product Overview

The VN-110 is a Tactical-Grade Inertial Measurement Unit (IMU) and Attitude Heading Reference System (AHRS). The VN-110 incorporates the latest inertial sensor technology, combining 3-axis accelerometers, gyros and magnetometers into a compact embedded module or ruggedized package. Along with providing calibrated sensor measurements, the VN-110 also computes and outputs a real-time 3D orientation solution that is continuous over the complete 360 degrees of motion.









PRODUCT VARIATION		PART NUMBER	DESCRIPTION	QUANTITY	PRICE (USD)
VN-110		VN-110	VN-110 Tactical Series IMU and AHRS	1-4	Call for pricing
VN-110 (RS-232)		VN-110-A	VN-110 Tactical Series IMU and AHRS RS-232 on Primary Port	1-4	Call for pricing
VN-110E (Embedded)		VN-110E	VN-110E Tactical Embedded IMU and AHRS	1-4	Call for pricing
VN-110 Development Kit		VN-110-DEV	VN-110 Tactical Series IMU and AHRS Development Kit	1-4	Call for pricing
VN-110-A Development Kit		VN-110-A-DEV	VN-110 Tactical Series IMU and AHRS Development Kit, RS-232 on Primary Port	1-4	Call for pricing
VN-110E Development Kit		VN-110E-DEV	VN-110E Tactical Embedded IMU and AHRS Development Kit	1-4	Call for pricing

Product Options

- **Packaging:** The VN-110 is available in two different packaging options: an IP68 Rated anodized aluminum enclosure (VN-110) and board-mount Embedded (VN-110E). VectorNav offers a Development Kit option for the VN-110, VN-110-A, and VN-110E.
- **Calibration:** Each VN-110 and VN-110E unit is calibrated for bias, scale factor, misalignment and gyro g-sensitivity errors across the full temperature range of the sensor (-40°C to +85°C).
- **Lead Times:** Typical lead times for each of the part numbers listed above in quantities of 1-4 units is 1-2 weeks.
- **Volume Discounts:** VectorNav offers discounted pricing on each of the VN-110 and VN-110E for orders of five (5) or more units.
- **Minimum Order Quantity (MOQ):** There is no Minimum Order Quantity for the VN-110. There is a Minimum Order Quantity of (1) VN-110E Development Kit, per customer, prior to purchasing single VN-110E units.
- **Purchase:** Each of the listed VN-110 and VN-110E product options can be purchased directly from VectorNav by phone (+1-512-772-3615), or by issuing a Purchase Order via email (sales@vectornav.com) or fax (+1-512-772-3086), subject to VectorNav's Terms and Conditions of Sale (www.vectornav.com/terms-and-conditions-of-sale).

VN-110 Cabling

- **Custom Interfacing Cables:** The below list details interface cabling options for the VN-110. Upon request, VectorNav can provide VN-110 custom interface cables of varying lengths. Prices and lead times on custom cables vary.
- **Connectors:** The VN-110 uses Fischer Ultimate circular push-pull receptacle connectors. The part numbers for these connectors are:
 - Primary Port: UR02W07F010PBK3E2AB; Mating: UP01L07M010SBK3Z2ZB
 - Secondary Port: UR02W07F010PBK1E2AB; Mating: UP01L07M010SBK1Z2ZB

PRODUCT VARIATION		PART NUMBER	DESCRIPTION	QUANTITY	PRICE (USD)
Main Port Pigtail		VN-CMG-11120	VN-110 Main Port Pigtail Cable (10 ft./3 m)	1+	\$300
Main Port DB-15		VN-CMG-21120	VN-110 Main Port DB-15 Cable (10 ft./3 m) <i>(Recommended for Testing and Evaluation)</i>	1+	\$300
Main Port DB-15 to USB		VN-CMI-20072	VN-110 Main Port DB-15 to USB Adapter Cable (6 ft./1.8 m) <i>(Recommended for Testing and Evaluation, Requires Main Port DB-15 Cable)</i>	1+	\$150
Auxiliary Port Pigtail		VN-CAG-10120	VN-110 Auxiliary Port Pigtail Cable (10 ft./3 m)	1+	\$300
Auxiliary Port DB-15		VN-CAG-20120	VN-110 Auxiliary Port DB-15 Cable (10 ft./3 m)	1+	\$300
Auxiliary Port DB-15 to USB		VN-CAI-20072	VN-110 Auxiliary Port DB-15 to USB Adapter Cable (6 ft./1.8 m) <i>(Requires Auxiliary Port DB-15 Cable)</i>	1+	\$150

VN-110 Development Kit Options



VN-110 Development Kit Contents

- ▶ (1) VN-110 unit
- ▶ (2) Micro USB to USB Cables (2 meter & 3 meter)
- ▶ User Manual & Quick Start Guide
- ▶ (1) VN-CMG-21120 - Tactical Series Main Port DB-15 - 10 ft
- ▶ (1) VN-CMI-20072 - Tactical Series Main Port DB-15 to USB + 24V Wall Adapter
- ▶ (1) VN-CMG-11120 - Tactical Series Main Port Pigtail - 10 ft
- ▶ Hard-Shell Pelican™ Carrying Case

VN-110E Development Kit Contents

- ▶ (1) VN-110E unit, pre-installed to Development Board with 24-pin mating connector
- ▶ Board Size: 76 x 76 x 14 mm (3 x 3 x 0.55 in)
- ▶ 24-pin 0.1" Header
- ▶ (2) Micro USB to USB Cables (2 meter & 3 meter)
- ▶ 1.8 m (6 ft) DB-9 Serial Cable
- ▶ DIP Stick
- ▶ User Manual, Quick Start Guide & Documentation
- ▶ Hard-Shell Pelican™ Carrying Case



Payment, Export & Shipping

- ▶ VectorNav accepts payment by bank wire transfer and ACH (VectorNav's banking details available upon request), check or credit card (VISA, Mastercard & AMEX accepted).
- ▶ VectorNav requires Cash-In-Advance (CIA) payment for all first-time customers. Please provide VectorNav a copy of your credit references if you wish to apply for Net-30 terms.
- ▶ For local support, please see a full list of VectorNav's global representatives at www.vectornav.com/about/global-sales.
- ▶ VectorNav ships within the USA via UPS and FedEx, and internationally via DHL, UPS and FedEx.
- ▶ All VN-110 and VN-110E products ship with a Certificate of Conformance. Upon shipment VectorNav provides via email a copy of the invoice for the purchase and tracking number for the package.
- ▶ Purchase: Each of the above listed VN-110 and VN-110E product options can be purchased directly from VectorNav by phone (+1-512-772-3615), or by issuing a Purchase Order via email (sales@vectornav.com) or fax (+1-512-772-3086), subject to VectorNav's Terms and Conditions of Sale (www.vectornav.com/terms-and-conditions-of-sale).



HEADQUARTERS

VectorNav Technologies
10501 Markison Road
Dallas, TX 75238
USA

Tel: +1.512.772.3615
Fax: +1.512.772.3086
Email: sales@vectornav.com
Web: www.vectornav.com