

# **VN-200 GNSS/INS**

# Miniature, high-performance GNSS-Aided INS

#### **Product Overview**

The VN-200 is a miniature, high-performance GNSS-Aided Inertial Navigation System (GNSS/INS) that combines 3-axis gyros, accelerometers and magnetometers, a high-sensitivity GNSS receiver, and advanced Kalman filtering algorithms to provide optimal estimates of position, velocity and attitude.



#### **Product Options**

- ▶ Packaging: The VN-200 is available in two different packaging options: surface mount device (SMD) and aluminum-encased Rugged module. VectorNav offers Development Kits for each of these options, as well as a Breakout Board option for the SMD.
- ► Calibration: All VN-200 units are calibrated for bias, scale factor, misalignment and gyro sensitivity errors across the full temperature range of the sensor from -40°C to +85°C (Thermal Calibration). A Standard Calibration option is not offered for the VN-200.
- ▶ Lead Times: Typical lead times for each of the part numbers listed below in quantities of 1-9 units is 1-2 business days ARO.
- ▶ Volume Discounts: VectorNav offers discounted pricing on the VN-200 for orders of ten (10) or more units. Contact VectorNav to request volume pricing on any of the below listed part numbers.
- ▶ Minimum Order Quantity (MOQ): There is no Minimum Order Quantity for any VN-200 product option.
- ▶ Purchase: Each of the below listed VN-200 product options can be purchased directly from VectorNav online (www.vectornav.com/purchase/buy-vn-200), 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).

PRODUCT VARIATION		PART NUMBER	DESCRIPTION	QUANTITY	PRICE (USD)
VN-200 SMD	VECTORNAV	VN-200T	VN-200 SMD, Thermal Calibration	1-9	\$2,400
VN-200 Rugged	VECTORNAY	VN-200T-CR	VN-200 Rugged, Thermal Calibration	1-9	\$2,900
VN-200 SMD Dev Kit	8	VN-200T-DEV	VN-200 SMD Development Kit, Thermal Calibration	1-9	\$2,800
VN-200 Rugged Dev Kit	NOTORNAY	VN-200T-CR-DEV	VN-200 Rugged Development Kit, Thermal Calibration	1-9	\$3,200
VN-200 SMD Breakout Board	The state of the s	VN-200T-BB	VN-200 SMD Soldered to Breakout Board, Thermal Calibration	1-9	\$2,430

### **VN-200 Development Kit Options**

#### **VN-200 SMD DEVELOPMENT KIT CONTENTS**

- ▶ Development Board with pre-installed VN-200 SMD
- ▶ (2) Micro USB to USB Cables (2 & 3 m)
- ▶ (1) 1.8 (6 ft.) DB-9 Serial Cable
- ▶ (1) GNSS Antenna

#### VN-200 RUGGED DEVELOPMENT KIT CONTENTS

- VN-200 Rugged unit
- ▶ (1) RS-232 Serial Adapter Cable
- ▶ (1) USB Adapter Cable
- ▶ (1) GNSS Antenna

- ▶ (2) Coin Cell Batteries
- DIP Stick
- User Manual & Quick Start Guide
- Carrying Case
- ► Cable Connection Tool
- ▶ User Manual & Quick Start Guide
- Carrying Case





## **VN-200 Cabling & GNSS Antennas**

- ▶ Custom Interface Cables and GNSS Antennas: The below list details interface cabling options for the VN-200 Rugged, as well as GNSS antenna options for the VN-200 SMD and VN-200 Rugged. Upon request, VectorNav can provide VN-200 Rugged custom interface cables of varying lengths and/or with certain pins broken out. VectorNav also carries limited stock of GNSS antennas of varying cable lengths. Prices and lead times on custom cables and GNSS antennas vary.
- ▶ Connectors: The VN-200 Rugged uses Harwin 10-pin locking connectors. The part numbers for these connectors are:
  - Harwin M80-5001042: male connector on the VN-200 Rugged
  - Harwin M80-4861005: female connector on the VN-200 Rugged interfacing cables

PRODUCT VARIATION		PART NUMBER	DESCRIPTION	QUANTITY	PRICE (USD)
VN-200 Rugged USB Cable		VN-C200-0310	VN-200 Rugged USB Adapter Cable	1+	\$100
VN-200 Rugged RS-232 Cable		VN-C200-0410	VN-200 Rugged Serial RS-232 Adapter Cable	1+	\$100
VN-200 Rugged Pigtail Cable		VN-C200-0610	VN-200 Rugged Pigtail Adapter Cable with Pin 10 Flyout Wire	1+	\$100
VN-200 GNSS Antenna		VN-C200-0510	VN-200 GNSS Antenna Tallysman™ 2412 (Tallysman™ 4422 available for SWaP-constrained applications)	1+	\$100

# **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-200 products ship with a Certificate of Conformance. Upon shipment VectorNav provides via email the invoice for the purchase and tracking number for the package.