

VECTOR V200

Professional, robust and high performance GPS Compass



Experience superior navigation from the accurate heading and positioning performance available with the Vector V200 GNSS Compass.

The multi-GNSS Vector V200 supports GPS, GLONASS, BeiDou, Galileo, and QZSS and offers an amazing world-wide 30 cm (RMS) accuracy via Atlas GNSS global correction service.

The Vector V200 offers an incredible combination of simple installation, small form factor, and amazing performance.

The compass - measuring only 35 cm in length - mounts easily to a flat surface or pole. The stability and maintenance-free design of the Vector V200 provides simple integration into autopilots, chart plotters, and AIS systems.

KEY FEATURES

- L1 GPS, GLONASS, Galileo, BeiDou, QZSS
- 0,3 m RMS world-wide positioning accuracy with Atlas corrections
- Integrated gyro and tilt sensors help deliver fast start-up times and provide heading updates during temporary loss of satellites
- Provides heading, positioning, heave, roll and pitch
- Excellent in-band and out-of-band interference rejection
- 0.75 degree heading accuracy (option)

TECHNICAL SPECIFICATIONS

Sensor Specifications

Receiver Type:	Vector GNSS L1 Compass
Signals Received:	GPS, GLONASS, BeiDou, WAAS-EGNOS, Atlas, QZSS ⁷
Channels:	424
GPS Sensitivity:	-142 dBm
SBAS Tacking:	2-channel, parallel tracking
Update Rate:	10 Hz standard, 20 Hz optional
Rate of Turn:	100°/s maximum
Cold start:	60 s (no almanac or RTC)
Warm Start:	30 s typical (almanac and RTC)
Hot Start:	10 s typical (almanac, RTC and position)
Heading Fix:	10 s typical (valid position)
Maximum Speed:	1,850 km/h (999 kts)
Maximum Altitude:	18,288 m (60,000 ft)
Differential Options:	Atlas, SBAS, QZSS

Accuracy

Positioning:	Default (RMS)	Optional (RMS)
Autonomous no SA ¹ :	1.5m	1.5m
SBAS (EGNOS) ² :	0.5m	0.3m
Atlas (L-band):	-	0.3m
Heading:	1.5°	0.75°
Pitch/Roll:	1.5°	
Heave:	30cm ³	

Communications

Ports:	
5-pin:	NMEA 2000 or RS-232(2Tx,2Rx)
12-pin:	RS-232 (1Tx,1Rx), RS-422 (2Tx,2Rx)
Timing Output:	1PPS, CMOS, active high, rising edge sync, 10 kΩ, 10 pF load, 20 ns ⁶
Baud Rates:	4800 - 115200
Correction I/O	
Protocol:	RTCM SC-104
Data I/O Protocol:	NMEA 0183, NMEA 2000, Crescent binary ⁵

Power

Input Voltage:	6 to 36 VDC
Power Consumption @12VDC:	SBAS 3,6W Atlas 4,0W
Power Isolation:	Isolated to enclosure
Reverse Polarity Protection:	Yes

Environmental

Operating Temperature:	-40°C to + 70°C
Storage Temperature:	-40°C to + 85°C
Humidity:	95% non-condensing
Compass safe distance:	0.5 m ⁴
Vibration:	IEC 60945: 2002
EMC:	IEC 60945: 2002 EN 301 489-1 V2.1.1 EN 301 489-5 V2.1.1 EN 301 489-19 V2.1.0 EN 303 413 V1.1.1

Mechanical

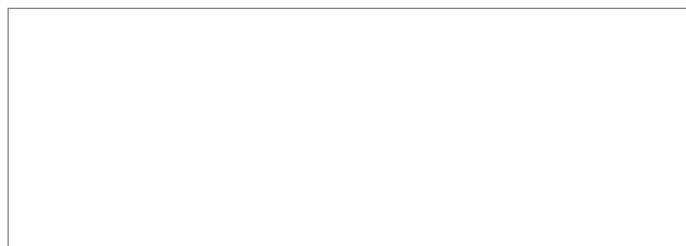
Dimensions:	
No Mount:	34.8 L x 15.8 W x 7.5 H (cm)
LP flat mount:	34.8 L x 15.8 W x 7.6 H (cm)
HP flat mount:	34.8 L x 15.8 W x 10.7 H (cm)
Pole Mount:	34.8 L x 15.8 W x 16.8 H (cm)
Weight:	0.75 kg
Including mount:	0.94 kg

Power/Data Connector: 5-pin or 12-pin

Aiding Devices:

Gyro:	Provides smooth heading, fast heading re-acquisition and reliable 1° per minute heading for periods up to 3 minutes when loss of GPS has occurred
Tilt Sensor:	Provides pitch and roll data and assist in fast start-up and re-acquisition of heading solution.

- ¹ Depends on multipath environment, number of satellites in view, satellite geometry, no SA, and ionospheric activity
- ² Depends on multipath environment, number of satellites in view, WAAS coverage and satellite geometry
- ³ Depends on multipath environment, number of satellites in view, satellite geometry, baseline length (for differential services), and ionospheric activity
- ⁴ Based on a 40 second time constant
- ⁵ True Heading GNSS proprietary
- ⁶ Requires a Hemisphere GNSS subscription
- ⁷ With future firmware upgrade and activation



True Heading Dealer

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