GNSS RECEIVER

FEATURES

- Multi-Frequency L1/L2/L5 RTK GNSS receiver
- Multi-constellation GNSS support
- Centimeter level position accuracy in RTK mode
- High Accuracy 1 PPS output
- Rugged IP67 enclosure
- Power, RF Link & Health LED Indicators

APPLICATIONS

- Autonomous Ground Vehicle (AGV)
- Unmanned Ground Vehicle (UGV)
- Surveying and Mapping
- Precision Agriculture
- Land and Marine Applications
- Robotics
- Precise Time Synchronisation

DESCRIPTION

The DENEB, DNB-GBM200 is a robust high-performance multi-frequency, multi-constellation GNSS receiver that delivers precise position in standalone and centimeter level position accuracy in Real Time Kinematic (RTK) mode. The rugged design of DNB-GBM200 meets the operational requirements of applications such as robotics and autonomous vehicles. It is also suitable for surveying and handheld applications where weight and size matter.

The DENEB, DNB-GBM200 is a multi-frequency L1/L2/L5 GNSS receiver with GPS, GLONASS, Galileo, Beidou, IRNSS/NavIC and SBAS support. It provides UTC synchronized 1PPS CMOS output. The multi-constellation high gain GNSS antenna assures an uninterrupted satellite signal making the DNB-GBM200 a right choice for high precision positioning and surveying applications.

TECHNICAL SPECIFICATIONS

Parameter Name	Parameter Value	Unit	Precondition
Position & Velocity Accuracy			
Horizontal Position[1]	1	cm	CEP with RTK
	1.5	m	CEP in Standalone mode
Vertical Position[1]	1	cm	CEP with RTK
	2	m	CEP in Standalone mode
Dynamic Heading Accuracy [3]	0.03	Deg	-
Velocity Accuracy [3]	0.1	Deg	-
GPS / GNSS			
Type	GPS L1CA/L1P/L1C/L2P/L2C/L5 GLONASS G1/G2/G3, P1/P2 BeiDou B1i/B2i/B3i/B1C/B2a/B2b/AceBOC GALILEO E1BC/E5a/E5b/E6BC/ AltBOC QZSS L1CA/L2C/L5/L1C/L6 NavIC (IRNSS) L5	-	-
Update Rate	10	Hz	-
TTFF [1,2] Cold Start	60	seconds	-
Reacquisition Time	2	seconds	-
Protocols	NMEA 0183 and RTCM v3.3	-	-
Connector	D38999 Series III	-	-
Interface Options	RS232	-	--
LED Indicators	Power, RF Link and Health	-	-
Antenna			
Type	Multi-Constellation GNSS Antenna	-	-
Connector	Power/Configuration, SMA (GNSS x 1, RF x 1)	-	-
Physical			
Size	156 (L) x 80 (W) x 56 (H)	mm	-
Weight	<1	kg	-
Environmental Compliant			
Operating Temperature (°C)	-40 to +71	°C	-
Storage Temperature (°C)	-55 to +85	°C	-
Ingress Protection	IP67	-	-
Humidity (%)	10 to 90 (non– condensing)	%	-
EMI/EMC	MIL-STD-461E/F	-	-
Vibration	MIL-STD-810G	-	-
Integrated Radio	1W 865—867	MHz	Transceiver

1 - Open sky conditions
2 - Time to First Fix
3 - 50% at 30m/s for dynamic operation
* - Factory upgradable

ORDERING INFORMATION

DNB - GBM200 (Product Code: 28015)

MADE IN INDIA

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