JAVAD

DELTA-3N

GPS L1/L2/L2C/L5, Galileo E1/E5A/E5B/AlBoc
GLONASS L1/L2/L3, BeiDou B1/B2

864 GNSS channels of DELTA-3N allow tracking all current and future satellite signals.

The DELTA-3N is a powerful and reliable receiver for high-precision navigation systems, including high dynamics systems, for machine and traffic control, as well as for high-precision surveying and geodynamics and aerogeophysics applications.

DELTA-3N can operate as a receiver for post-processing, as a Continuously Operating Reference Station (CORS) or portable base station for Real-time Kinematic (RTK) applications, and as a scientific station collecting information for special studies, such as ionosphere monitoring and the like.

DELTA-3N

Tracking Features*

- Total 864 channels: all-in-view
- GPS C/A, P1, P2, L2C (L+M), L5 (I+Q)
- Galileo E1 (B+C), E5A (I+Q), E5B (I+Q), AltBoc
- GLONASS C/A, L2C, P1, P2, L3 (I+Q)
- QZSS C/A, L1C(I+Q), L2C (L+M), L5 (I+Q), SAIF
- BeiDou B1, B2
- SBAS L1, L5
- In-Band Interference Rejection
- Advanced Multipath Reduction
- Fast acquisition channels
- High accuracy velocity measurement
- Almost unlimited altitude and velocity(for authorized users)

Performance Specifications

- Autonomous: <2 m
- Static, Fast Static Accuracy:
    Horizontal: 0.3 cm + 0.1 ppm * base_line_length**
    Vertical: 0.35 cm + 0.4 ppm * base_line_length
- Kinematic Accuracy:
    Horizontal: 1 cm + 1 ppm * base_line_length
    Vertical: 1.5 cm + 1 ppm * base_line_length
- RTK (OTF) Accuracy:
    Horizontal: 1 cm + 1 ppm * base_line_length
    Vertical: 1.5 cm + 1 ppm * base_line_length
- DGPS Accuracy:
    < 0.25 m post processing; < 0.5 m real-time
- Real-time heading accuracy:
    ~ 0.004/L [rad] RMS, where L is the antenna separation in [m]
- Cold/Warm Start/ Reacquisition:
    <35 seconds /<5 seconds/ <1 second

Data Features

- Up to 100 Hz update rate for real time position and raw data (code and carrier)
- 10 cm code phase and 1 mm carrier phase precision
- IEEE 1588 protocol support
- Hardware Viterbi decoder
- RTCM SC104 versions 2.x and 3.x Input/Output
- NMEA 0183 versions 2.x and 3.0 Output
- BINEX Output
- Code Differential Rover
- Code Differential Base
- Geoid and Magnetic Variation models
- RAIM
- Different DATUMs support
- Output of grid coordinates

Data Storage

- Up to 16 GB of onboard non-removable memory for data storage
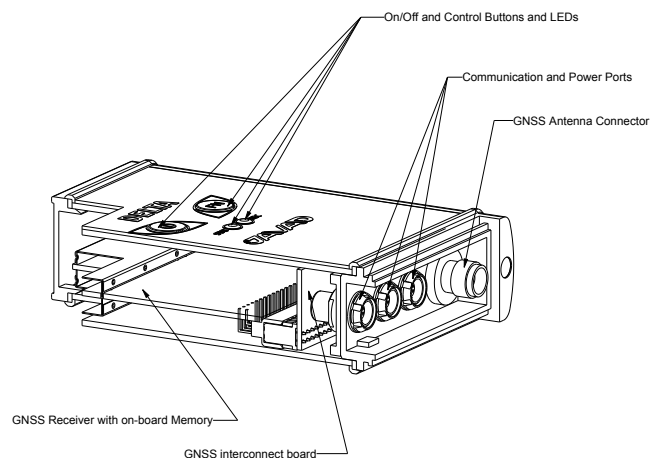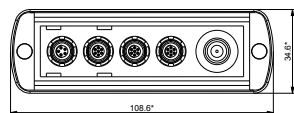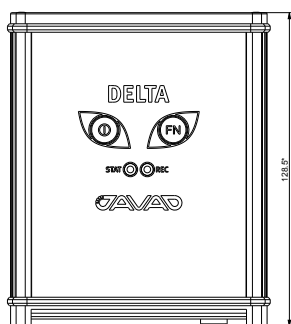
Input/Output

- Two serial RS232 port (up to 460.8 kbps)
- Two high-speed RS232/RS422 serial port (up to 460.8 Kbps)
- High-speed USB 2.0 device port (480 Mbps)
- Full-duplex 10BASE-T/100BASE-TX Ethernet port
- CAN 2.0
- Two 1 PPS
- Two Event Markers
- IRIG A134, A137, B124, B137
- External Reference Frequency Input/Output
- Two LEDs, two function keys (TriPad)
- Power Specification
- External power input
- Power consumption: 4.5 Watt
- Input voltage: +4.5 to +35 Volts

Environmental

- Operating Temperature: -40°C to +70°C
- Storage Temperature: -45°C to +85°C
- Humidity: 95%
- High shock and vibration resistance

Physical

- Dimensions: 4.3x1.4x5.6/max 6.3 inches (109x35x141/ max 160 mm) with connectors
- Weight: 0.92 lbs (0.42 kg)

On/Off and Control Buttons and LEDs
Communication and Power Ports
GNSS Antenna Connector
GNSS Receiver with on-board Memory
GNSS interconnect board

* For the full list of standard and optional features see www.javad.com

** For good observation conditions and proper length of observation session

JAVAD GNSS
www.javad.com
Rev.1.0 February 20, 2016

Specifications are subject to change without notice