DeltaS-3

for TRE-3

GPS L1/L2/L2C/L5, Galileo E1/E5A/E5B/AlBoc/E6

GLONASS L1/L2/L3, BeiDou B1/B2/B3

We introduce DeltaS-3 receiver with 864 channels along with three powerful processors and program memory in a single chip which uses less power and makes the total system less expensive.

864 GNSS channels of this receiver allow tracking all current and future satellite signals. DeltaS-3 is the only receiver in the market that can track and decode the QZSS LEX signal messages.

DeltaS-3 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.

DeltaS-3 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.

DeltaS-3

Tracking Features
- Total 864 channels: all-in-view
- GPS: C/A, L1C (P+D),P1, P2, L2C (L+M), L5(I+Q)
- GLONASS: C/A, L2C, P1, P2, L3 (I+Q)
- Galileo: E1 (B+C), E5A (I+Q), E5B (I+Q), AltBoc, E6
- BeiDou B1, B1-2, B1C(P+D), B5A(I+Q), B2, B5B(I+Q), B3
- QZSS: C/A, L1C (P+D), L2C (L+M), L5 (I+Q), SAIF, LEX
- SBAS** L1, L5
- IRNSS L5
- In-Band Interference Rejection
- Advanced Multipath Reduction
- Fast acquisition channels
- High accuracy velocity measurement

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

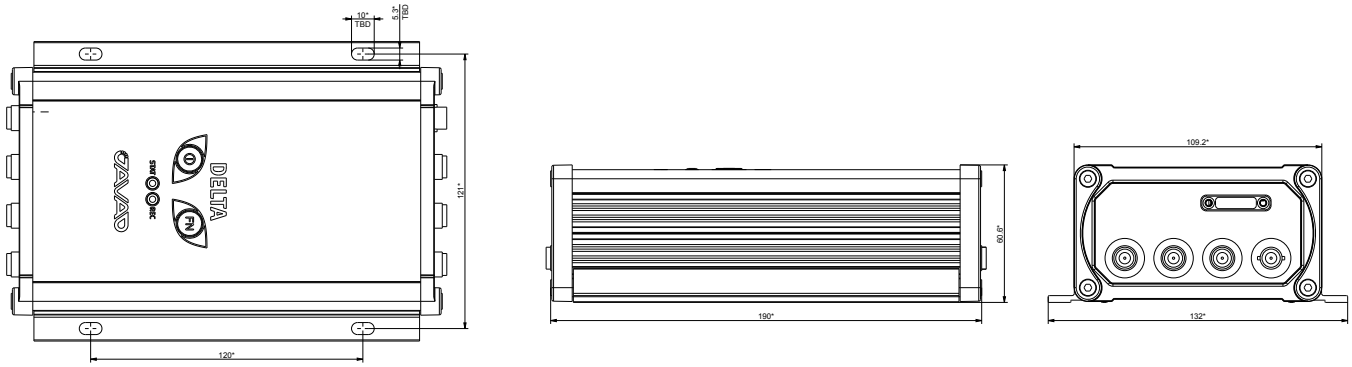
Data Storage
- Up to 16 GB of onboard non-removable memory for data storage

Power Specification
- External Power Input: Two (primary and secondary)
- Power Consumption: 8 Watt
- Input Voltage: +10 to +30 volts

Input/Output
- GNSS Antenna Connector: 50 Ohm TNC, +5 VDC (100 mA) to power LNA.
- Tree serial RS232 ports (up to 460.8 kbps)
- 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 port
- Two 1PPS synchronized
- Two Event Markers; IRIG
- External Reference Frequency Input/Output
- Two LEDs, two function keys (TriPad)

Environmental
- Enclosure: Aluminum extrusion, waterproof IP67
- Operating Temperature: -40°C to +70°C
- Storage Temperature: -45°C to +85°C
- Humidity: 100%
- High shock and vibration resistance

Physical
- Dimensions: 5.2 x 2.4 x 7.48 inches (132 x 61 x 190 mm)
- Weight: 1.65 lbs (750 g)



* For the full list of standard and optional features see www.javad.com
** US WAAS, European EGNOS, Russian SDCM, Indian GAGAN, Japanese MSAS, and similar future satellite systems
*** For good observation conditions and proper length of observation session

Specifications are subject to change without notice

JAVAD GNSS
www.javad.com
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