



GNSS RECEIVER

FOR TRE-3N (GPS L1/L2/L2C/L5, GALILEO E1/E5A/E5B/ALBOC,  
GLONASS L1/L2/L3, BEIDOU B1/B2)

## DELTA-3N



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

## GNSS RECEIVER \*

Total 864 channels: all-in-view	
Signals Tracked	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 BeiDou: B1, B1-2, B1C(P+D), B5A (I+Q), B2, B5B (I+Q) QZSS: C/A, L1C (P+D), L2C (L+M), L5 (I+Q), SAIF SBAS* L1, L5 IRNSS L5
Autonomous Accuracy (rms)	<2 m
Static, Fast Static Accuracy (rms)	Horizontal: 0.3 cm + 0.1 ppm * base_line_length** Vertical: 0.35 cm + 0.4 ppm * base_line_length
Kinematic Accuracy (rms)	Horizontal: 1 cm + 1 ppm * base_line_length Vertical: 1.5 cm + 1 ppm * base_line_length
RTK (OTF) Accuracy (rms)	Horizontal: 1 cm + 1 ppm * base_line_length Vertical: 1.5 cm + 1 ppm * base_line_length
DGPS Accuracy (rms)	< 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 Start	<35 seconds
Warm Start	<5 seconds
Reacquisition	<1 second

## ENVIRONMENTAL

Operating Temperature***	-40° C to +70° C
Storage Temperature***	-45° C to +85° C
Humidity	95% condensing
Dimensions	4.3x1.4x5.6/max 6.3 inches (109x35x141/ max 160 mm) with connectors
Weight	0.92 lbs (0.42 kg)
Shock	High shock and vibration resistance

\* For the full list of standard and optional features see [www.javad.com](http://www.javad.com)

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

\*\*\*Li-Ion batteries are the temperature limiting factor

# DELTA-3N

## 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

## I/O

Communication Ports	Two serial RS232 ports (up to 460.8 kbps) Two high-speed RS232/RS422 serial ports (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
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Other I/O Signals	Two LEDs, two function keys (TriPad)
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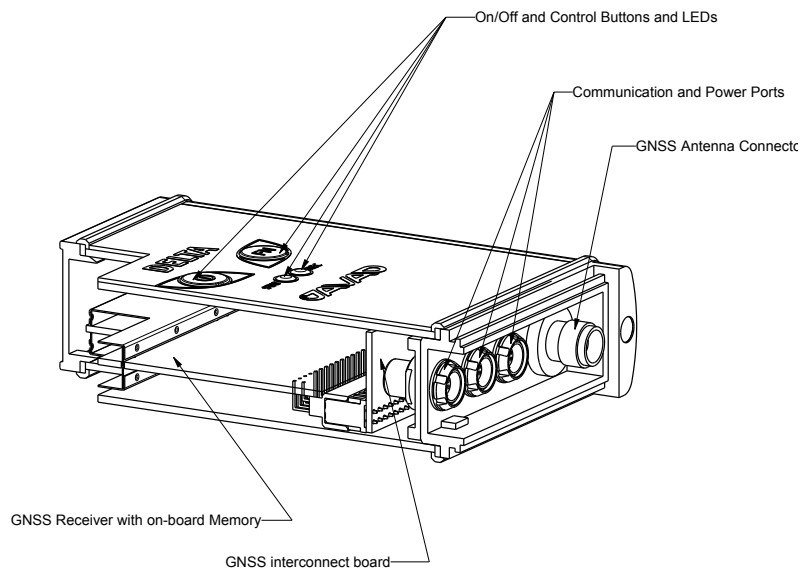
## POWER SPECIFICATION

External Power Input	1
Power consumption	5.5 Watt
Input voltage	+4.5 to +35 Volts

## DATA STORAGE

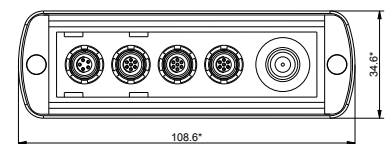
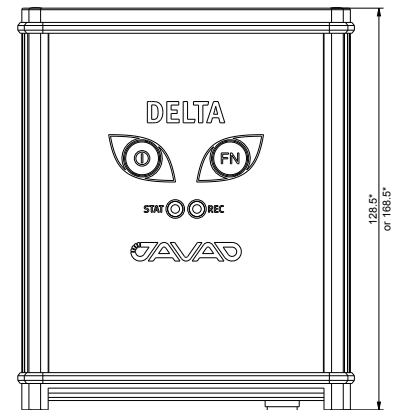
Up to 16 GB of onboard non-removable memory for data storage

# DELTA-3N



## EASY MANAGEMENT WITH NETVIEW&MODEM

NetView&Modem is a free application allowing the user to easily control JAVAD GNSS DELTA-3N receivers, i.e. allowing efficiently managing receiver parameters and commands via a user friendly graphical interface.



All dimensions are in mm



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