



DELTA-G2T

FOR TRE-G2T

The DELTA receiver is based on our TRIUMPH Technology implemented in our TRIUMPH Chip. For the first time in the GNSS history, we offer up to 100 Hz RTK, 216 channels of multi-frequency GPS and Galileo in a small nice-looking durable watertight box with the TRE-G2T board inside.

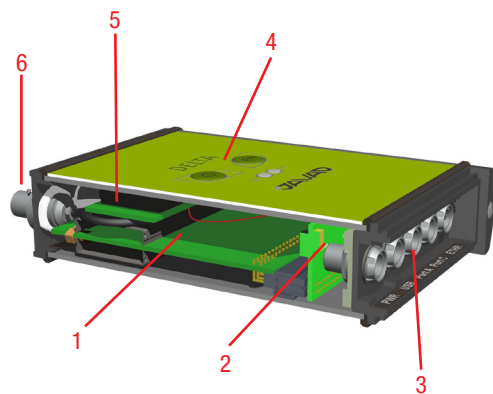
Delta-G2T is a powerful and reliable receiver for high-precision navigation systems, including high dynamics systems, for machine and traffic control, as well as for high-precision surveying and geodynamics and aerogeophysics applications.

Delta 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-G2T

Main Features*

- GPS L1/L2/L2C/L5
- Galileo E1/E5A
- QZSS L1/L2/L5
- Compass B1**
- Update rate 5Hz, 10Hz, 20Hz, 50Hz, 100Hz
- RTK rate 1 Hz, 5Hz, 10Hz, 20Hz, 50Hz, 100Hz
- Data recording up to 2048MB
- RAIM
- TriPad interface
- RS232 serial port (460.8 kbps)
- External GNSS Antenna TNC Female connector
- Multi-Base Code Differential Rover
- Code Differential Base
- Advanced Multipath Reduction
- Two event markers
- Two 1 PPS timing strobes
- 1 PPS level converter
- CAN port
- External Reference Frequency Input/Output
- External Reference Output Frequency converter
- Up to 3 high-speed RS232 serial ports
- High-speed RS232/RS422 serial port
- USB port
- Ethernet
- WAAS/EGNOS/MSAS (SBAS)



1. GNSS Receiver with on-board Memory
2. GNSS Interconnect Board
3. Communication and Power Ports
4. On/Off and Function Buttons and LEDs
5. Reference Converter Board (optional)
6. External GNSS Antenna Connector

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

** Board TRE_G2TH_4 or newer

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

**** With connectors

Description	Total 216 channels: all-in-view (GPS L1/L2/L5, Galileo E1/E5A, QZSS L1/L2/L5, Compass B1, SBAS L1/L5) integrated receiver
Tracking Specification	
Signals tracked	GPS C/A, P1, P2, L2C (L+M), L5 (I+Q) Galileo E1 (B+C), E5A (I+Q) QZSS C/A, L1C (I+Q), L2C (L+M), L5 (I+Q), SAIF Compass B1; SBAS L1, L5
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 + 1.5 ppm * base_line_length
RTK (OTF) Accuracy	Horizontal: 1 cm + 1 ppm * base_line_length Vertical: 1.5 cm + 1.5 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
Power Specification	
Battery	External
Power Consumption	2.5 W
Input Voltage	+4.5 to +35 volts (1 external power port)
I/O	
GNSS Antenna Connector	50 Ohm TNC, +5 VDC (100 mA) to power LNA.
Communication Ports	3 serial RS232 port (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
Other I/O Signals	2x 1 PPS synchronized 1 PPS level converter (0 to 4V on 500hm load) 2x Event Marker IRIG External Reference Frequency Input/Output External Reference Output Frequency Converter (5/10/20MHz, -2dBm to +13dBm, step 1dB)
Status Indicator	Two LEDs, two function keys (TriPad)
Memory & Recording	
Internal Memory	Up to 2048MB of on-board non-removable memory for data storage
Raw Data Recording	Up to 100 times per second (100Hz)
Real Time Data	
Input/Output	JPS, RTCM SC104 v. 2.x and 3.x, CMR
Output	NMEA 0183 v. 2.x and 3.0, BINEX
Environmental Specifications	
Enclosure	Aluminum extrusion, waterproof IP66
Operating /Storage Temperature	-40° C to +80° C / -45° C to +85° C
Humidity	95% non-condensing
Dimensions	4.29 x 1.38 x 5.55 /6.3**** in (109 x 35 x141/ 160**** mm)
Weight	0.87 lbs (0.39 kg)

Specifications are subject to change without notice



JAVAD GNSS
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