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.
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)

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