



DELTA

for Duo-G2, Duo-G2D, Duo-G3D

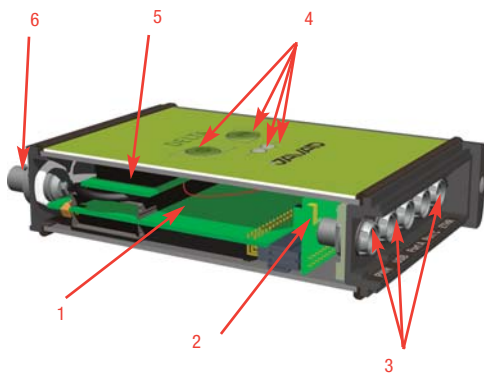
We offer the multi-frequency satellite-based two-antenna system DELTAD in a small nice-looking durable watertight box. The system is based on our TRIUMPH Technology implemented in the TRIUMPH Chip and includes 216 channels of multi-frequency GPS, Galileo, and GLONASS. The dual-frequency code and carrier phase data from two antennas are processed to determine the heading angle and the RTK positions of the two antennas up to 50 times per second. DELTAD is a powerful and reliable receiver for high-precision navigation systems to be used in various applications, such as machine and traffic control, precision agriculture, etc.

Standard Configuration

- GPS L1 (G2)
- GPS L1/L2/L2C (G2D and G3D)
- GLONASS L1/L2 (G3D only)
- Update rate 1 Hz
- RAIM
- TriPad interface
- RS232 serial port (460.8 kbps)
- 2 External GNSS Antenna TNC Female connectors

Optional Feature

- Galileo E1
- QZSS
- Compass B1
- WAAS/EGNOS/MSAS (SBAS)
- Update rate 5Hz, 10Hz, 20Hz, 50Hz & 100Hz
- Heading rate 1 Hz, 5Hz, 10Hz, 20Hz, 50Hz
- Data recording up to 2048MB
- Multi-Base Code Differential Rover
- Code Differential Base
- Advanced Multipath Reduction
- Two event markers
- Two 1 PPS timing strobes
- CAN port
- 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

Features/Receiver Type	DeltaD		
	G2	G2D	G3D
Channels	216		
GPS C/A, P1	2	2	2
GPS L2C (L+M), P2	-	2	2
Galileo E1 (B+C)	2	2	2
GLONASS C/A, L2C, P1, P2	-	-	2
QZSS C/A, L1 (I+Q), SAIF	2	2	2
QZSS L2C (L+M)	-	2	2
Compass B1	√	√	√
SBAS L1	√	√	√
Size, mm (WxHxD)	109 x 35 x 141/max 160 with connectors		
Weight, g	414		518
Autonomous Accuracy	<2m		
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		
Real-time heading accuracy	~ 0.004/L [rad] RMS*		
DGPS Accuracy	< 0.25 m Post Processing, < 0.5 m Real Time		
Pos/ fix update rate	up to 50 Hz RTK+heading		
Cold start, warm start	<35 s, <5 s		
Reacquisition	<1 s		
GNSS Antenna Connector 50 Ohm TNC, +5 VDC (100 mA) to power LNA	2		
RS232 up to 460.8 kbps	3		
RS232/RS422 up to 460.8 kbps	1		
USB (480 Mbps)	1		
Full-duplex 10BASE-T/100BASE-TX Ethernet port	1		
CAN 2.0	1		
IRIG	1		
Event Marker	2		
1PPS	2		
Battery	-		
Input Voltage	+4.5 to +35 volts	+6.0 to +35 volts	
Power consumption	2.2 W		3.9 W
TriPad	Two buttons, two LEDs		
On-board flash	2048 MB		
Enclosure	Aluminum extrusion, waterproof IP66		
Operation temperature	-40° C to +80° C		
Storage temperature	-45° C to +85° C		
GNSS Antenna	External		
Real-time Data Input/Output	JPS, RTCM SC104 v. 2.x and 3.x, CMR		
Real-time Data Output	NMEA 0183 v. 2.x and 3.0, BINEX		

* For good observation conditions and proper length of observation session
** where L is the antenna separation in [m]

Specifications are subject to change without notice



JAVAD GNSS
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