TRIUMPH-2

The revolution in size, function and GPS scalability! The TRIUMPH-2 brings rugged, scalable, affordable, best-in-class GNSS performance to every application.

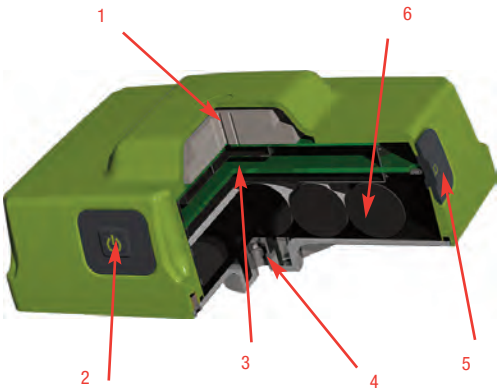
TRIUMPH-2 is based on our TRIUMPH Technology implemented in our TRIUMPH Chip. We offer very powerful GIS field mapping receiver with up to 100 Hz RTK, 216 channels of dual frequency GPS and GLONASS in a small attractive, sturdy, and watertight box.

Using its internal Bluetooth and WiFi connection the receiver can access local GNSS Reference Station Network. In addition to post-processed DGPS capabilities, the TRIUMPH-2 utilizes external correction services for real-time DGPS mapping and navigation applications.

TRIUMPH-2

Main Features*

- GPS L1/L2
- GLONASS L1/L2
- SBAS L1
- Positioning using Kalman Filter SBAS DGPS
- RTK Rate up to 100 Hz
- Data Recording up to 2GB
- RAIM
- USB
- Multi-Base Code Differential Rover
- Advanced Multipath Reduction
- Internal GNSS Antenna
- Bluetooth® and WiFi Interface
- Internal Bluetooth/WiFi Antenna
- Internal Rechargeable Li-Ion Battery



1. GNSS Antenna
2. On/Off button
3. GNSS Receiver, power board with Bluetooth, WiFi, and on-board Memory
4. 1/4-20" Mounting Thread
5. Record button
6. Rechargeable Li-Ion battery pack

Description	Total 216 channels: all-in-view (GPS L1/L2, GLONASS L1/L2, SBAS L1) integrated receiver
Tracking Specification	
Signals tracked	GPS C/A, P1, P2, L2C (L+M) GLONASS C/A, L2C, P1, P2 SBAS L1
Performance Specifications	
Autonomous	<2 m
Static, Fast Static Accuracy	Horizontal: 0.3 cm + 0.5 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
Cold Start	<35 seconds
Warm Start	<5 seconds
Reacquisition	<1 second
Power Specification	
Battery	Internal Li-Ion battery (7.2 V, 8.85 Ah) with internal charger
Operation Time	Up to 25 hours
Input Voltage	+10 to +16 volts
GNSS Antenna Specifications	
GNSS Antenna	Internal NGS calibrated
Antenna Type	Microstrip (Zero Centered)
Ground Plane	Antenna on a flat ground plane
I/O	
Communication Ports	Built-in USB to RS232 FTDI converter. 12Mbps USB 2.0 Full-Speed; Wi-Fi (IEEE 802.11b/g); Bluetooth V2.0+EDR Class 2 supporting SPP Slave Profile
External Power port	1 port
Memory & Recording	
Internal Memory	Up to 2 GB of onboard 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
Status Indicator	Six LEDs, two function keys (MinPad)
Environmental Specifications	
Enclosure	Metal base, plastic cover; IP67
Operating Temperature	-40° C to +60° C **
Storage Temperture	-45° C to +85° C **
Humidity	100% condensing
Dimensions	3.34 x 2.40 x 5.20 inches (85 x 61 x 132 mm)
Weight	1.23 lbs (0.56 kg)

* For the full list of standard and optional features see www.javad.com
** The operating temperature range of Li-Ion batteries is -30 ° C to +55°
The storage temperature of Li-Ion batteries is -20 ° C to +45°

Specifications are subject to change without notice

JAVAD GNSS

www.javad.com

Rev.1.2 March 5, 2014