

# TRIUMPH-1

## 216 channels

GPS + GLONASS + Galileo



**Better than 30 cm GIS... instantly  
or 5 cm static**



Actual size

**GISmore** stand-alone or  
inside the hat

**Bluetooth wireless  
connection to GISmore**

- GPS L1
- Galileo E1
- GLONASS L1
- 100 Hz update rate
- RAIM
- Rechargeable Li-Ion Battery
- GNSS Antenna
- GSM Module
- Bluetooth® Interface
- Bluetooth/GSM Antenna



**Many  
ways  
to use**

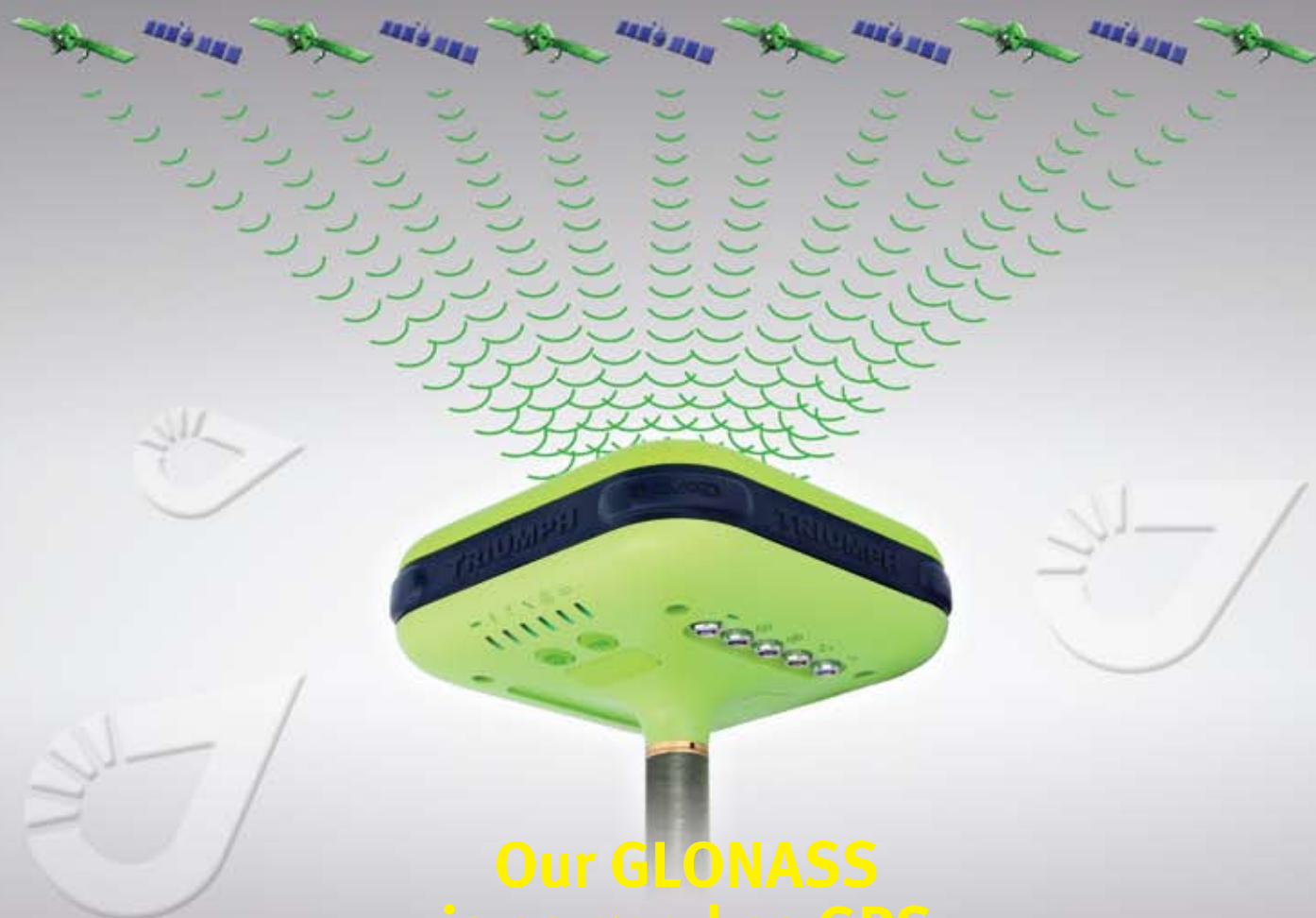
GPS + GLONASS + Galileo

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# TRIUMPH

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216 sophisticated channels

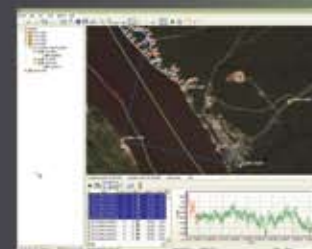


**Our GLONASS  
is as good as GPS**

We dynamically and continuously calibrate GLONASS  
inter-channel biases with an accuracy of  
**0.2 millimeter**

## • Justin

*A comprehensive Survey  
and GIS software*



## • Tracy

*A versatile and powerful  
field software*



## • Giodis

*Full-featured office  
post-processing software*



GPS + GLONASS + Galileo

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**TRIUMPH**

**TRIUMPH**

*Experience  
Vision  
Commitment*

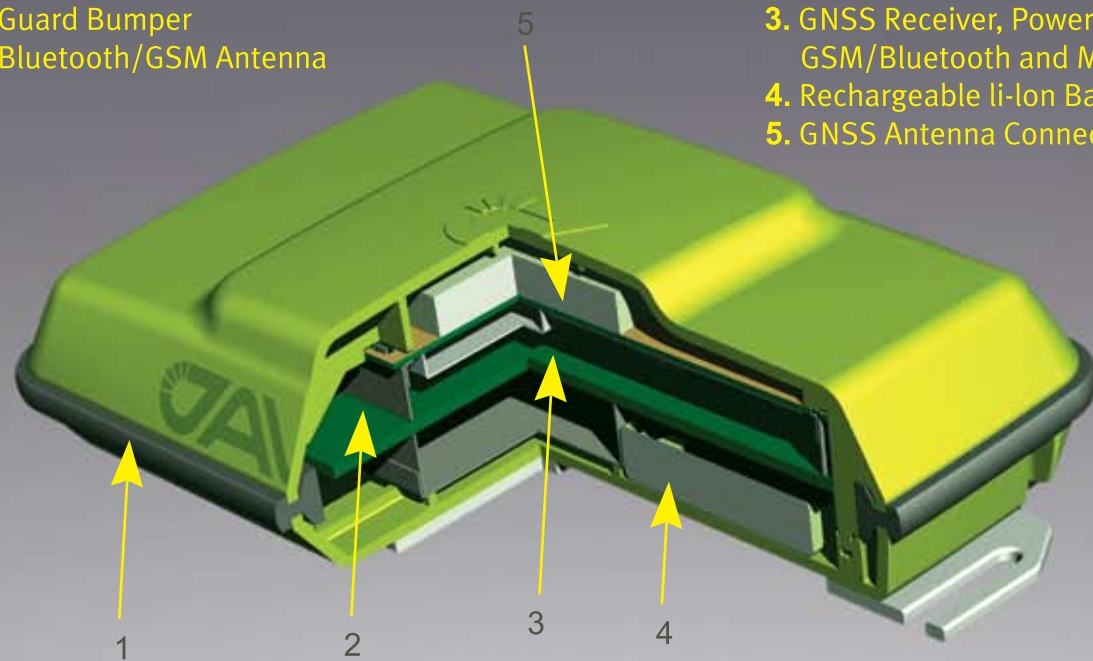
**216**  
channels



*Quality Manufacturing  
In San Jose, California*

1. Guard Bumper
2. Bluetooth/GSM Antenna

3. GNSS Receiver, Power Board, GSM/Bluetooth and Memory
4. Rechargeable li-Ion Battery
5. GNSS Antenna Connectors



# 216-channel TRIUMPH

## Tracking Specification

Tracking Channels  
GPS L1/Galileo E1/GLONASS L1

Signals Tracked  
L1 C/A, Code & Carrier

## Power Specification

Battery  
Internal Li-Ion battery (3.7 V, 1.05 Ah) with internal charger

Operating modes Standby mode  
Call mode

Input Voltage +4.5 to +6.5 volts

## GNSS Antenna Specifications

GNSS Antenna Internal  
Antenna Type Microstrip (Zero Centered)  
Ground Plane Antenna on a flat ground plane

## Radio Specifications

GSM/GPRS Module  
Internal GSM/GPRS quad-band module, GPRS Class 10

GSM/GPRS Antenna Internal

## I/O

Internal Communication Port  
Bluetooth V2.0+EDR Class 2 supporting SPP Slave and Master Profiles

External Power port 1 port

GSM Status Indicator One LED

## Performance Specifications

Static, Fast Static Accuracy  
Horizontal: 5 cm + 0.5 ppm \* base\_line\_length  
Vertical: 5 cm + 0.5 ppm \* base\_line\_length

Kinematic Accuracy  
Horizontal: 5 cm + 1 ppm \* base\_line\_length  
Vertical: 5 cm + 1.5 ppm \* base\_line\_length

RTK(OTF) Accuracy  
Horizontal: 5 cm + 1 ppm \* base\_line\_length  
Vertical: 5 cm + 1.5 ppm \* base\_line\_length

DGPS Accuracy < 0.25 m Post Processing,  
< 0.5 m Real Time

Cold Start <65 seconds

Warm Start <5 seconds

Reacquisition <1 second

## Memory & Recording

Internal Memory  
Up to 256 MB of onboard non-removable memory for data storage

Raw Data Recording  
Up to 100 times per second (100 Hz)

Data Type  
Code and Carrier from GPS L1/Galileo E1/GLONASS L1

## Environmental Specifications

Enclosure High impact plastic, waterproof

Operating Temperature -4° C to +55° C

Dimensions W: 79 mm x H: 33 mm x D: 131 mm

Weight 210 g

# Stimulus Package for Surveyor's Recovery

Dear American and Canadian Surveyors...

With the current economic situation, we understand that for a while, your business may not have as much work as before. We view this as an opportunity for you to use this time to upgrade your equipment and train on the latest technology.

Our American-made GNSS receivers contain technology that no one else offers. For example:

- JAVAD GNSS offers **216-channel** receivers while the second best offer 76 channels. Furthermore, their 76-channel technology is based on designs which are at least six years old.

- By dynamically and continuously calibrating GLONASS signals to an accuracy of **0.2 millimeter**, only JAVAD GNSS offers quality GLONASS tracking that is as good as GPS. Without our GLONASS tracking, other receivers provide no advantage for you or worse, may hurt your observations and you may not even notice it.

- Only JAVAD GNSS can offer Galileo tracking. No one else has it. They even do not have "memory code", which is essential for Galileo.

To be a partner with you during this difficult time and help you upgrade your equipment to the latest technology — that can support you now and in the future — we offer the following program:

1. For a limited time, you can purchase as many as three receivers at economy-sensitive prices.

2. If you wish to purchase the unit(s) outright, you can buy our TRIUMPH-1 RTK receivers for **\$5,500** each.

3. For a lower cash-outlay, you can purchase our TRIUMPH-1 RTK

receivers for **\$3,300** each now and then pay an additional \$6,600 each as your business recovers. This is an honor system with no questions asked. It is only YOU who will decide when your business has recovered and you are in a position to pay the rest. We believe in trust and partnership.

Each TRIUMPH-1 receiver in this offer can be used as base or rover for 1 Hz RTK and consists of triple frequency GPS, integrated internal antenna, dual-internal rechargeable batteries (up to 20 hours of continuous work), Advanced Multipath Reduction in all channels, In-band Interference Rejection, WAAS/EGNOS, internal UHF modem, internal GSM, Bluetooth, two serial ports, and USB. The receivers can be upgraded to include GLONASS and Galileo and many other features at low prices when you decide you need these enhancements.

As for data logging and post processing software, we offer our state-of-the-art Tracy and Justin software for an additional cost of \$1,000 each. Carlson software is another option that you may obtain from us or from Carlson Software directly.

We offer this program directly to you, or through our dealers who have agreed to

participate with almost no profit to them. Our worldwide support system can assist you in ways that you have never experienced. Our policy is to support all customers within **24 hours** for any problem they may have. With this offer, we will also provide a **two month money back guarantee** if, for whatever reason, you want to return the units. No questions asked.

In a return to the business days of yore, this is a no-collateral, handshake offer. From the bottom of my heart, I want to help rebuild the survey business in America. This is all about building partnerships. We are convinced that once you use our superior technology, we will be able to keep you as a future customer. As for our innovative win-win offer, I want to again stress that it is based on trust. For those of you who opt for option 3 above, when you make money with our equipment, you will be happy to pay us the remainder of the cost.

For more details or to order, please visit

