Introducing

# TRIUMPH-LS

## The ultimate **L**and **S**urvey machine

25 2.5 8640 864

## Complete RTK Unit


The most channels

Rugged Fully Integrated

The best performance and productivity

Interference protection and monitoring

Lightest weight in class Best battery life

An unbelievable price

# Store and Stake like never before

**Stakeout**

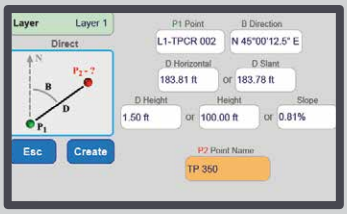
**Survey**

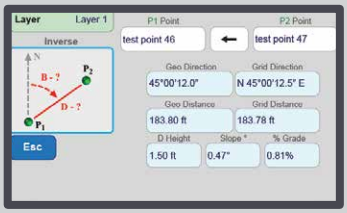
**GIS**

Introducing GUIDE data collection in the TRIUMPH-LS. Visual Stake-out, navigation, six parallel RTK engines, over 3,000 coordinate conversions, advanced CoGo features, rich attribute tagging on a high resolution, large, bright 800x480 pixel display.

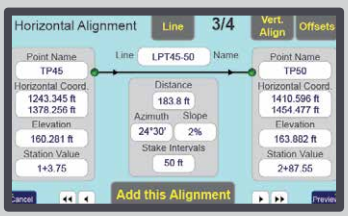
Versatile attribute tagging, feature coding and automatic photo and voice documentation.

The TRIUMPH-LS automatically updates all firmware when connected to a Wi-Fi internet connection.






# Productivity & Performance

## 864 Channels, All Satellite signals, 6-parallel RTK engines, Visual Stake out, innovative simple and accurate field line work.

channels

**864**

~~440~~

~~220~~

~~216~~

~~76~~

~~12~~

~~4~~

JAVAD has always been the channel count leader with 12, 76, and 216 channel receivers and now we introduce the TRIUMPH-LS with 864 channels combined with three powerful processors and program memory in a single chip which uses less power and makes the total system less expensive.


Some questioned the need for the 216 channels. They now realize the need for 440 channels. We assign multiple channels to each satellite for redundancy and reliability. We use over 100 channels to scan GNSS bands for interference (patent pending). 864 channels is the KEY to reliable performance.

Our satellite tracking technology, 6-parallel RTK engines, visual stakeout, revolutionary innovative simple and accurate field line work, visual stakeout, an unique interference monitoring and reporting feature, TRIUMPH-LS is the most advanced GNSS system ever built.

*GPS+GLONASS+Galileo+SBAS+BeiDou+QZSS

# Battery Life: 25 Hours; System Weight: 2.5 Kg (5.5 lb)

hours

**25**

~~10~~

~~8~~

~~6~~

~~4~~

~~2~~

25 hour battery life in RTK rover mode with full screen brightness and UHF/GSM. Hot Swappable" and "removable batteries" are concepts of the past.

Two hours of charge = Two days of surveying

The internal batteries are field serviceable and can be easily replaced by the user when needed.

The TRIUMPH-LS, including batteries and pole is the lightest complete GNSS RTK receiver in its class. The total weight of the TRIUMPH-LS RTK system, including radio, controller, pole and 25 hours of internal battery is 2.5 Kg.

For comparison, the Trimble R10, TSC3 data collector and pole, with about 5 hours of battery life is 3.57 Kg (7.86 lb).

~~50 (110)~~

~~30 (66)~~

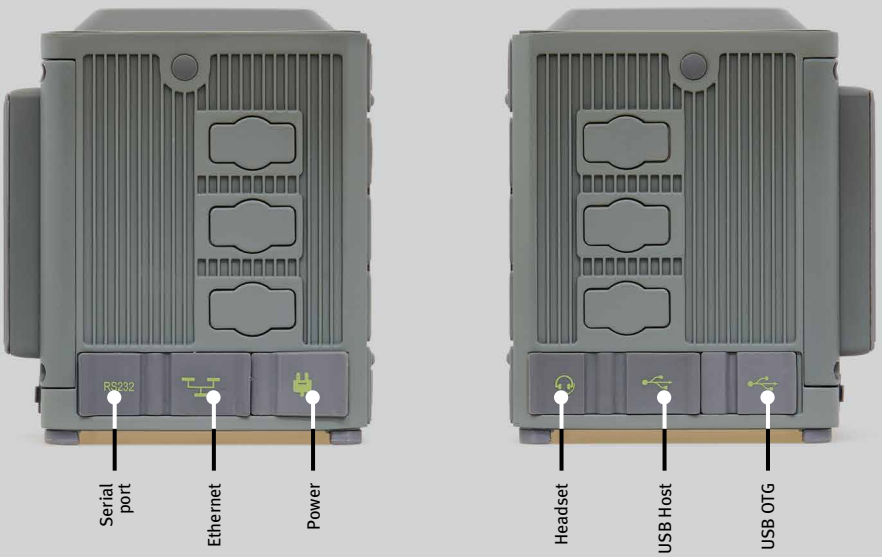
~~20 (44)~~

~~10 (22)~~

~~5 (11)~~

**2.5 (5.5)**

Kg (lb)



# TRIUMPH-LS
# Rugged, Tough, Versatile

Built on a tough magnesium alloy chassis, all connectors, SIM cards, Micro-SD cards are protected against the harshest environment.

You can collapse the pole and take the unit next to you in your car seat. There are no long poles and no separate controller and brackets to disassemble.

9 keys provide direct access to all functions. Six keys are user programmable.

The built in GNSS full tracking antenna has a large ground plane and the best centering and rotational performance on the market.

# $ 8,640

## complete RTK receiver system

### Receiver+Antenna+Radio Modem+Controller+Pole

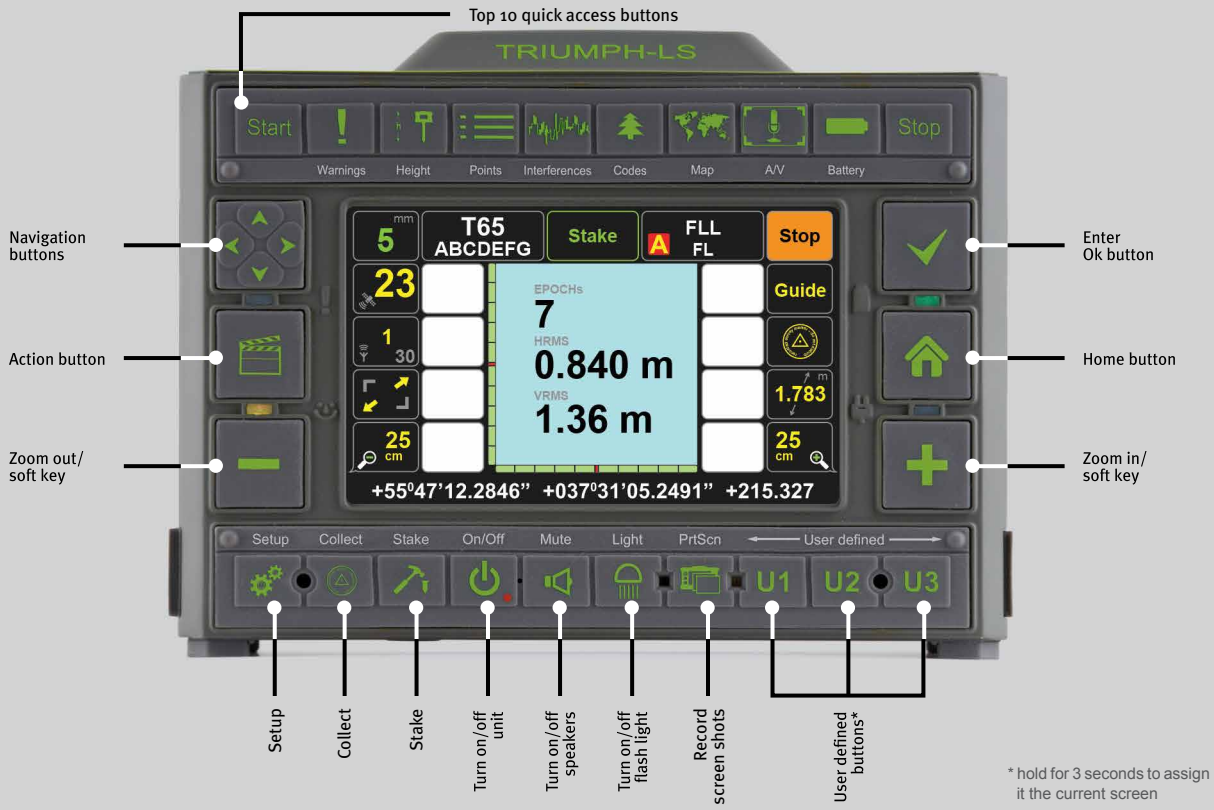
~~200,000~~
~~70,000~~
~~50,000~~
~~35,000~~
~~18,000~~

**8,640**

US $

- Base or Rover
- GSM Modem
- UHF Transmit & Receive
- Lifetime Firmware & Software Updates
- 3-Year Unlimited Warranty

U.S. Professional Land Surveyors (registered PLS) can test drive the TRIUMPH-LS for two weeks at no charge (includes 2 Day FedEx delivery and return).
See **www.javad.com** to reserve one (for U.S. Licensed PLS only).



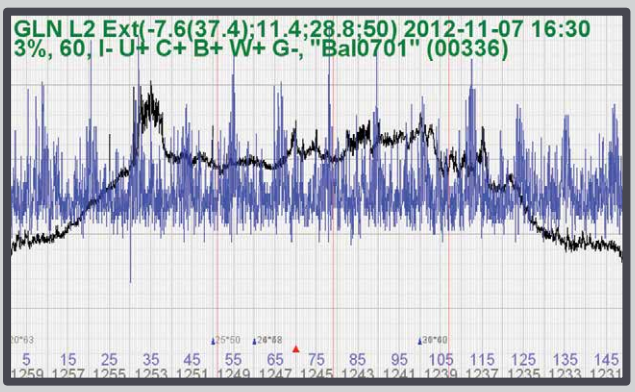
# Interference Monitoring and Reporting

**Radios**
**TV's**
**Radars**
**Harmonics**
**GSM**
**LTE**
**&**
**Jammers**

Have you noticed in some places on some days that your receiver does not operate as it should? Intentional and unintentional interference appears almost everywhere. The Triumph-LS has the best available interference protection. It is the only receiver that monitors and reports interference graphically and numerically. Over 100 channels are dedicated to continuous interference monitoring.

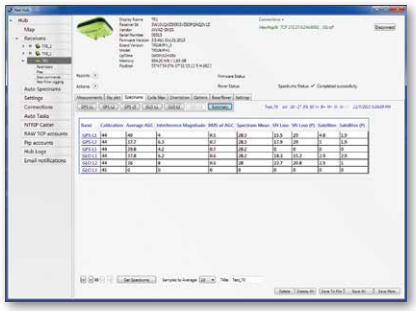
Interference awareness is a must when performing GNSS work. It allows safe GNSS operation in a city, airport and military environment.

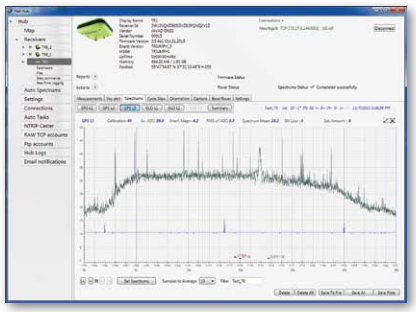

Some interference

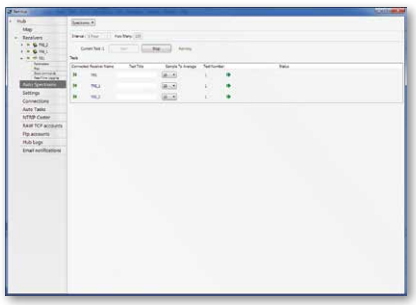



Big interference

# A one man coalition to protect all GNSS bands!







We protect against out-of-band and near-band interferences with J-Shield.

We protect against narrow in-band interferences with an 80'th order adaptive filter.

We monitor interferences in five different ways* in each receiver and report with Net-Hub.

This is true GNSS patriotism.

A one man coalition to protect all GNSS bands!

* 1) Spectrum Shape, 2) AGC values, 3) AGC variations, 4) Satellites C/No, 5) Satellites C/No variations