## You've come a long way, Survey!





View at WWW.JAVAD.COM

### **Another First ...**

#### **TRIUMPH-VS shows interferences in all GNSS bands**

Your GNSS receiver sometimes does not track satellites? Sometimes RTK solutions get stuck in "Float", or take longer to converge to "Fixed"? You may have interferences in one or more of your GNSS bands. In addition to harmonics of signals like local TV and radio stations, now there are \$10 GNSS jammers on the market that interfere with GNSS signals as well!

The GNSS spectrum analyzer feature of TRIUMPH-VS does much more than a generic \$30,000 spectrum analyzer. TRIUMPH-VS shows interferences by analyzing signals before RF and after digital sections and quantifies how much interference is in your neighborhood. See the reverse side for more detail.





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GPS L1

GPS L5

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#### **Three New Revolutionary Products**

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Cancel

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Apply





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Prepares Action Screen for Stake-Out Survey. This survey is done after stakes are planted in the Stake-out phase.



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#### 216 Channels GPS + GLONASS + Galileo Geodetic Receiver



## And Now... Introducing

# VICTOR-VS

## **New Controller**

TRIUMPH-VS not only scans the GNSS bands and shows the shape and frequencies of the interferences, but it also quantifies the magnitude of the interferences in two distinct and complementary ways: a) by analyzing the analog signal and determining the "Interference Magnitude", and b) by analyzing the S/N (Signal-to-Noise ratio) of all satellites' signals after they are digitized and processed (after code and carrier correlations) and determining the "Satellites S/N loss" due to interferences.

"Interference Magnitude" is determined by analyzing the amount of gain that we can apply to the GNSS signal before digitizing it. The more interference there is, the less we can amplify the signal to avoid saturation. We can determine the "Interference Magnitude" by comparing the actual amplification magnitude with our nominal amplification magnitude (when no interference exists).

"Satellites S/N loss" is determined by comparing the actual measured S/N of each satellite (for each of its signals) with its nominal S/N at that elevation angle and then averaging all such deviations for all satellite signals.

TRIUMPH-VS not only analyzes and shows interferences, it also has In-Band Interference Rejection option that removes in-band interferences.









See www.javad.com for details