TRIUMPH-LS & TRIUMPH-2
are now shipping

Our US Professional Land Surveyor (PLS) trial over the past year has been very successful. Before offering our latest products for sale, we reached out to more than 100 licensed surveyors to help us improve our TRIUMPH-LS and TRIUMPH-2 GNSS systems. More than 80 sets have been under test, and we have been in daily contact. We have worked hard to incorporate their suggestions to offer equipment that works the way surveyors work.

To review our progress, from July 18 to July 21, 2014 we had workshops in our San Jose Headquarters, with 10 of the licensed surveyors who had participated more intensely in this program. The workshops were very successful. We will incorporate their new suggestions and start shipping to customers world-wide by the end of August.

Product details and prices are as shown in the following pages. In the United States, you can purchase from us directly. Our support team can assist you. In other countries contact our dealers listed in our website.

The PLS folks in this picture are also part of our support team. See their contact information in www.javad.com. They can assist you with technical questions as well as helping you through the purchasing process. We are very grateful to them and many others who helped us during the past 12 months to improve and build the type of products that we are all proud of, and more important, products that surveyors are comfortable using.

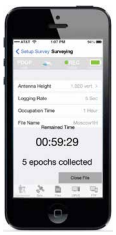
And of course the improvements will continue as free software updates.

JAVAD TRIUMPH-2 Scalable GPS

Static → GLONASS → RTK Base → RTK Rover

The **TRIUMPH-2** brings affordable, best-in-class Static and RTK GNSS performance at a groundbreaking price.

TRIUMPH-2 (GPS, static): **GPS L1/L2 Dual Frequency OPUS** receiver, includes 2 GB on-board memory, Advanced Multipath Reduction, USB, Bluetooth and WiFi interfaces, 25 hours Li-Ion battery. **JAVAD iOS/Android application** makes the download of data from the receiver and upload of data to NGS OPUS or to JAVAD Data Processing Online Service (DPOS) for online processing.



Complete receiver setup and OPUS submission with our iPhone and Android App!

$2,490

TRIUMPH-2 (GPS and **GLONASS**, static): GPS L1/L2 and GLONASS L1/L2 **Dual Frequency** receiver, includes 2 GB on-board memory, Advanced Multipath Reduction, USB, Bluetooth and WiFi interfaces, 25 hours Li-Ion battery.
OPUS does not process GLONASS data at the moment, but many CORS stations are equipped with GLONASS capable receivers and provide user with GLONASS raw data.
JAVAD Data Processing Online Service (**DPOS**) is JAVAD similar online service, which processes GPS and GLONASS data.

GLONASS G1+G2

+ $1,000

$3,490

TRIUMPH-2 RTK: GPS L1/L2 and GLONASS L1/L2 **Dual Frequency** configurable as **RTK rover or base** receiver, includes 2 GB on-board memory, Advanced Multipath Reduction, "Lift & Tilt" technology, Inclinometers and Electronic Compass, USB, Bluetooth and WiFi interfaces, 25 hours Li-Ion battery.

+RTK

+ $1,500

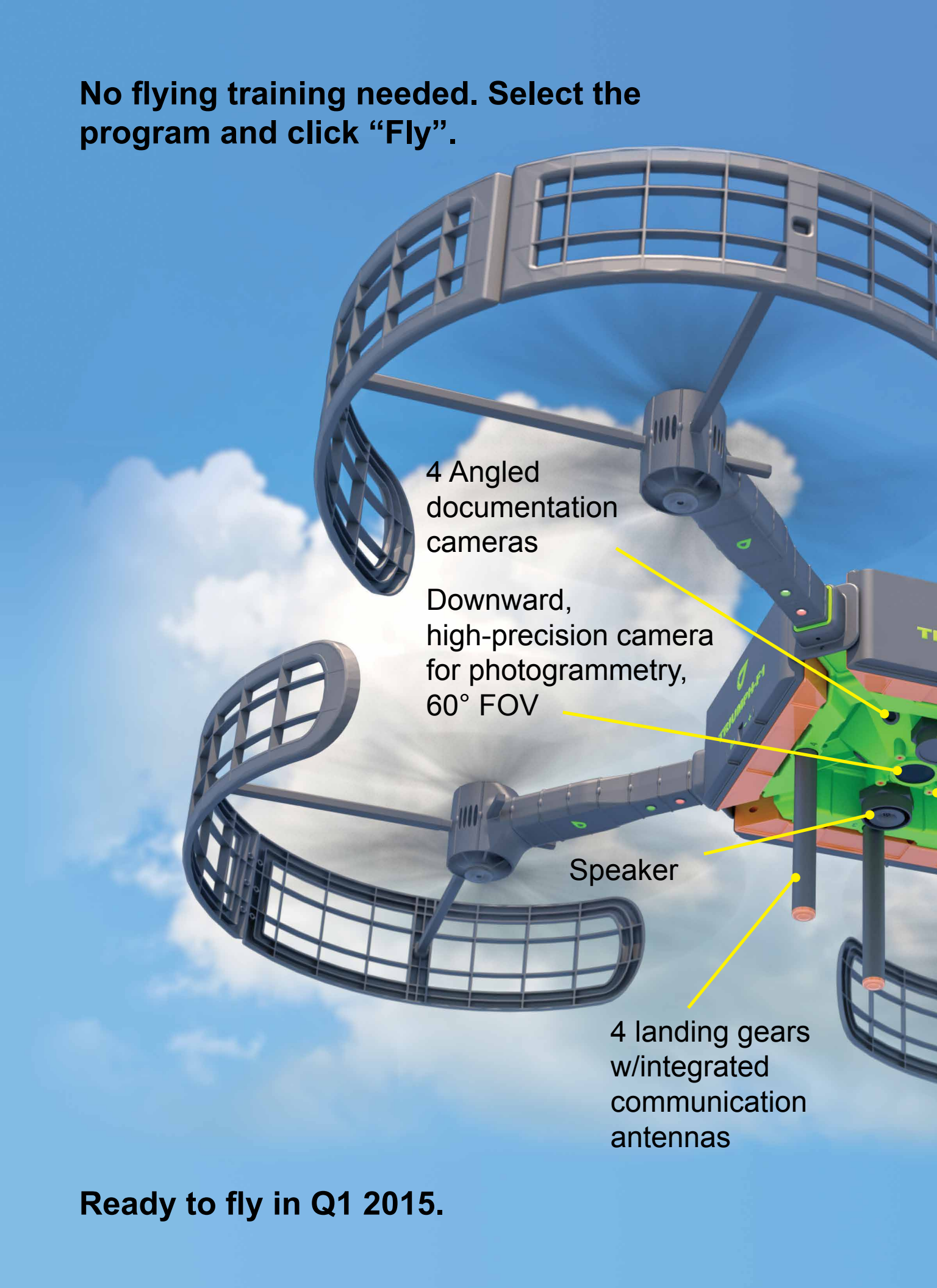
$4,990

Victor-LS controller with pre-installed **J-FIELD** software is being used **for field surveying and configuring** of Triumph-2 either as a rover or a base. Victor-LS is equipped with the internal 4G/LTE/3G card to access RTN from the field. As an option internal UHF or Frequency Hopping radio module could be installed to allow use of UHF radio link as correction source. Wi-Fi, Bluetooth and USB interfaces are available for data exchange.

Includes internal radio

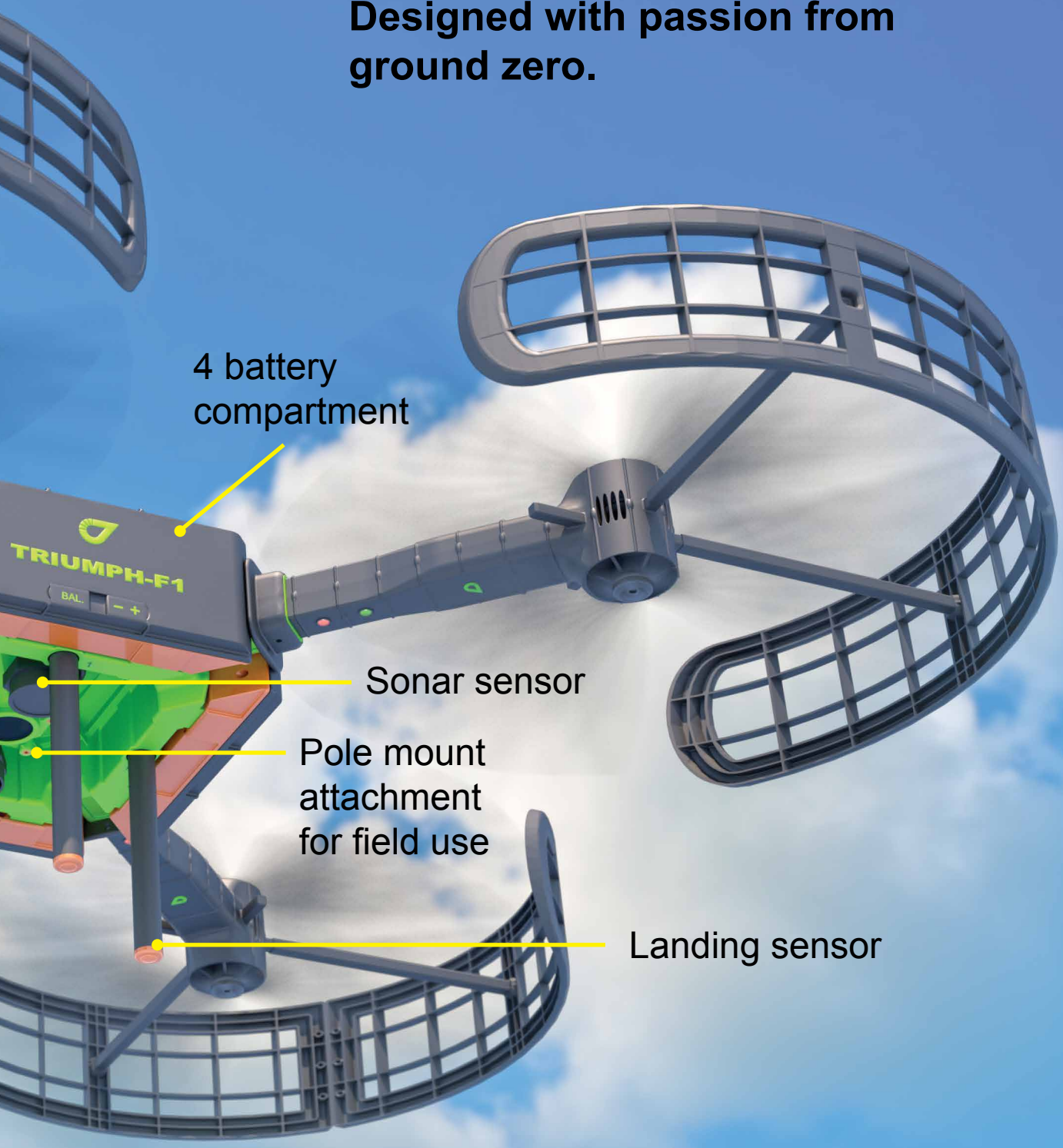
$2,990

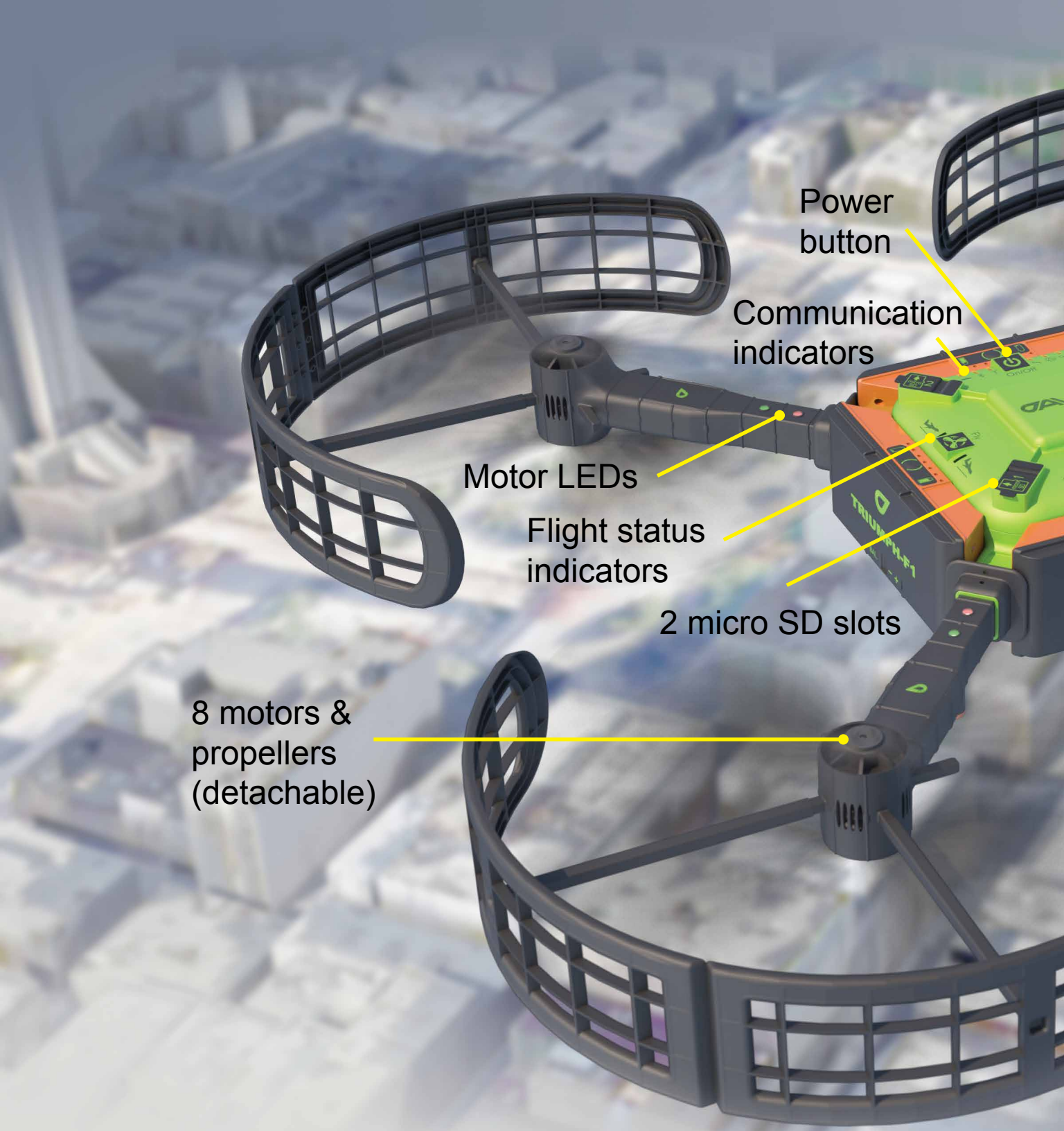
No flying training needed. Select the program and click “Fly”.



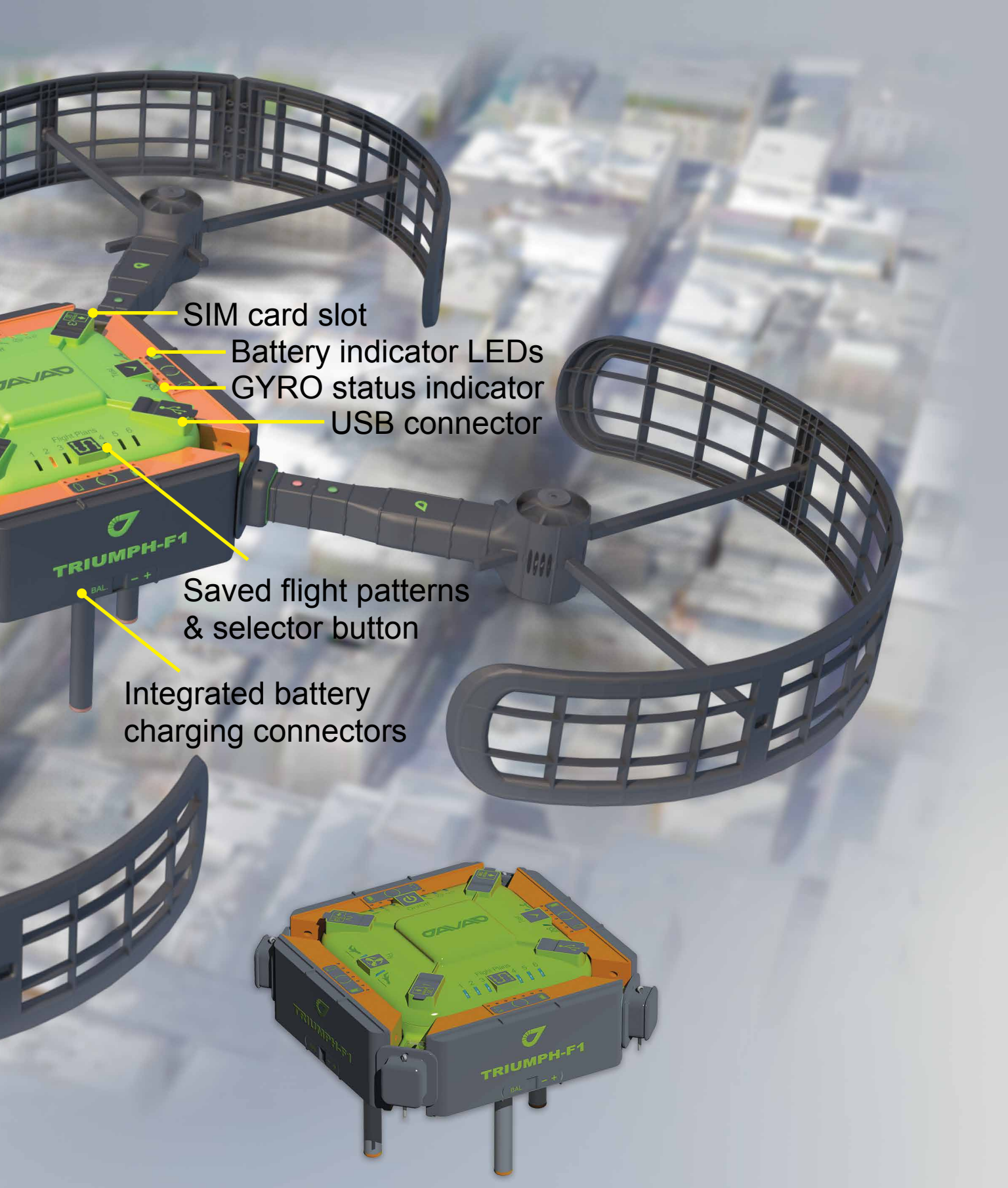
Ready to fly in Q1 2015.

We did not retrofit a toy with GPS. We designed and developed TRIUMPH-F1 as we did all of our other products… Designed with passion from ground zero.





See video at www.javad.com



TRIUMPH-F1 can be used as TRIUMPH-1 for field work as base or rover.

JAVAD TRIUMPH-1M 864 Channels
GPS + GLONASS + Galileo + BeiDou + QZSS

The new **TRIUMPH-1M** receiver inherits the best features of our famous TRIUMPH-1. Based on our new 864 channel chip, equipped with the internal 4G/LTE/3G card, easy accessible microSD and microSIM cards, includes “Lift & Tilt” technology.

TRIUMPH-1M RTK: GPS L1/L2/L5, GLONASS L1/L2, software upgradable to GALILEO E1/E5A/E5B/AltBoc, QZSS L1/L2/L5, BeiDou B1/B2, GLONASS L3, up to 100 Hz RTK GNSS surveying receiver. Triumph-1M is configurable as **RTK base or rover**. Standard configuration includes “Lift & Tilt”, inclinometers and compass, Advanced Mutipath Reduction, 5 Hz RTK base/ rover, 256 MB of data storage, USB, Bluetooth, Wifi, 4G/ LTE/3G or UHF or Frequency Hopping module.

$9,990

Victor-LS field controller (without internal radio) with pre-installed **J-FIELD** software is being used **for field surveying and configuring** of Triumph-1M either as a rover or a base.

$2,390

For **TRIUMPH-1M** and **TRIUMPH-2** receivers operating as a UHF base, the following external radios are available:

- 1 W **HPT401BT** radio with internal battery
- 1 W **HPT901BT** Frequency Hopping radio with internal battery
- 4 W **HPT404BT**
- 35 W **HPT435BT**

All radios are programmable directly from base GNSS receiver via Bluetooth interface.

Power, data cables and antenna are included.

1 W
$2,040

4 W
$1,640

35 W
$2,710

TRIUMPH-LS... The Ultimate Land Survey Machine

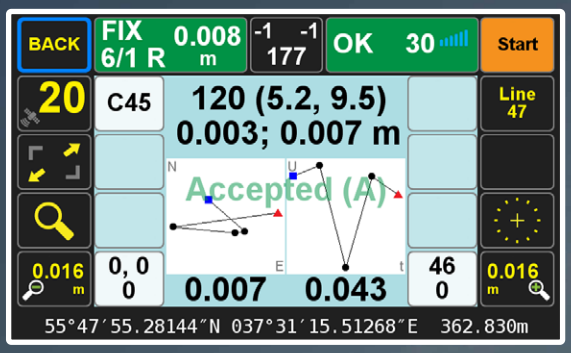
TRIUMPH-LS: standard configuration includes **5 Hz RTK Rover/Base**; **864 Channels**; **GPS** L1/L2/L2C/L5; **GLONASS** L1/L2/L3; **Galileo** E1/E5A/E5B/AltBOC; **BeiDou** B1/B2; WAAS/EGNOS; **QZSS**; 5 Hz Raw Data Recording; Communication Channel (UHF or 4G/LTE/3G); **6-parallel RTK** engines; RAIM; Advanced Multipath Reduction; Interference Viewing ; **"Lift & Tilt"** technology; Internal Versatile High Performance Geodetic Antenna; Wi-Fi; Bluetooth; USB Host; USB OTG; 8 GB MicroSD Card; 12.5 Hours Internal Battery; **Integrated Controller** and **J-FIELD** Software.

Receiver+Antenna+Radio Modem+Controller+Pole

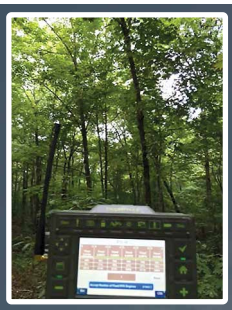
$12,990

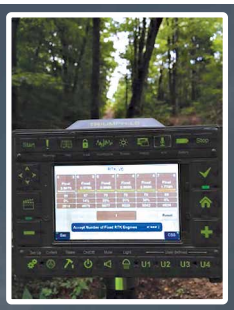
RTK Confidence... Unlimited

We claim that TRIUMPH-LS RTK system never gives a wrong fix; and we offer **$10,000** to any US PLS who prove otherwise. This is how it works: Select "Auto Verify", Select "Auto Accept" with your required accuracy. Set data collection to at least 30 epochs/seconds. If result is marked "Accepted", we guarantee that it is within your accuracy requirement with a margin of at most 3 cm. If you don't want to Auto Accept, review the statistics and decide to accept or reject.
Here is an example of the Auto Verify (patent pending).



- **120** is the number of position epochs. **5.2** is the average number of RTK engines during that 120 epochs.
- **9.5** is the final Confidence indicator. Numbers above 5 are excellent.
- **0.003 m** (horizontal) and **0.007 m** (vertical) on top of the graphs are the RMS of the 120 measurements.
- **0.007** and **0.043** are the horizontal and vertical scales of the guard band.
- **Four Verifies** (starting with the **blue square**) were used to set the guard band.
- **Red triangle** is the average of all 120 points (0.003 m and 0.007 m RMS)
- **46** and **0** mean 46 points were surveyed and none rejected.





– Here is just a couple of pictures showing 5 fixed engines in some pretty dense tree cover. I don't think I could get this shot with any other receiver. ***Matthew D. Sibole, PLS***

– Outstanding Matt. I've found these LS receivers to be incredible under deciduous canopy. Pine canopy still can be problematic to get a fix under – living in the "Piney Woods of East Texas" makes this a bummer. But even under pine trees the LS seems to perform better than anything else I've ever used. ***Shawn Billings, PLS***

I was trying the prior version of Verify tonight for my first time. It is truly wonderful. This accomplishes so much regarding reliability and my confidence in what my employees are doing in MY name.
Your Verify routine is perfect. It is clean, it documents everything, and is statistically rigorous. Congratulations! ***John Evers, PLS***

This is such a great option! – another feature setting Javad apart from the rest. Because I did not have my UHF I had to survey in a heavy canopy area with [redacted] R6 (GPS only) over the weekend. It took me an hour to get 4 separate 60 epoch burns on a Monument - dumping initialization between each - and when it was all over I had Two locations within 0.33' of each other and Two others 6 + feet away. I was sure missing my LS and this Verify feature. [redacted] ***, PLS***

www.javad.com