**GNSS RECEIVER** 

# **TRIUMPH-3**



The new powerful and reliable receiver for high-precision navigation systems is based on our 874 channel chip, equipped with the internal 4G/LTE/3G card, secure, accessible microSD and microSIM cards, and supports "Lift & Tilt" technology. The TRIUMPH-3 receiver can operate as a receiver for post-processing, as a Continuously Operating Reference Station (CORS) or portable base station for Real-time Kinematic (RTK) applications, and as a scientific station collecting information for individual studies, such as ionosphere monitoring and the like. In one word, it includes everything you need to perform the highly efficient job.

# **TRIUMPH-3**

## **GNSS RECEIVER**

Total 874 channels: all-in-view

Total 014 Channels, all-III-view		
Signals Tracked	GPS C/A, L1C(P+D), P1, P2, L2C(L+M), L5(I+Q) GLONASS C/A, P1, P2, L2C, L3(I+Q) Gallileo E1(B+C), E5A(I+Q), E5B(I+Q), AltBoc, E6(B+C) QZSS C/A, L1C(P+D), L2C(L+M), L5(I+Q), SAIF, LEX(P+D) BeiDou B1, B1-2, B1C(P+D), B5A(I+Q), B2, B5B(I+Q), B3 SBAS L1, L5 IRNSS L5	
Autonomous Accuracy (rms)	<2 m	
Static, Fast Static Accuracy (rms)	Horizontal: 0.3 cm + 0.1 ppm * base_line_length** Vertical: 0.35 cm + 0.4 ppm * base_line_length	
Kinematic Accuracy (rms)	Horizontal: 1 cm + 1 ppm * base_line_length Vertical: 1.5 cm + 1 ppm * base_line_length	
RTK (OTF) Accuracy (rms)	Horizontal: 1 cm + 1 ppm * base_line_length Vertical: 1.5 cm + 1 ppm * base_line_length	
DGPS Accuracy (rms)	< 0.25 m (post-processing) < 0.5 m (real-time)	
Cold Start	<35 seconds	
Warm Start	<5 seconds	
Reacquisition	<1 second	
INTERNAL GNSS ANTENNA		
Versatile High Performance Geodetic Antenna		
Antenna Type	Microstrip (Zero Centered)	
Ground Plane	Antenna on a flat ground plane	
LNA Gain	32±2 dB	
Enclosure	Molded magnesium alloy and plastic, IP67	
Color	Gray	
Operating Temperature***	-40° C to +60° C	
Storage Temperature***	-20° C to +45° C	
Humidity	100% condensing	
Dimensions	7.16 x 3.78 x 3.07 in (182 x 96 x 78 mm)	
Weight	2.755 lbs (1.25 kg)	
Shock	Survives a 2 m drop onto hard surface	

<sup>\*</sup> For the full list of standard and optional features see www.javad.com \*\* For good observation conditions and proper length of observation session \*\*\*Li-lon batteries are the temperature limiting factor

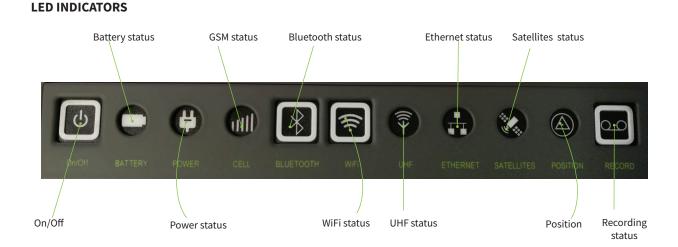
# **TRIUMPH-3**

RADIO	
4G LTE Mini Card	LTE, HSPA+, HSDPA, HSUPA, WCDMA, GSM, GPRS, EDGE (up to 100 Mbps) LTE, EV-DO, 1xRTT CDMA (up to 100 Mbps)
MicroSIM card slot	One; user accessible, fully sealed
Radio Modem	Internal 406-470MHz UHF radio Internal 902-928/ 868-870 MHz ISM radio (optional)
Base Power Output	1 Watt
I/O	
Communication Ports	Wi-Fi 5 GHz and 2.4GHz (802.11 a, b, g, n, d, e, i) Bluetooth 4.1 Compliance and CSA2 Support Dual-mode Bluetooth and Bluetooth LE Full-duplex 10BASE-T/100Base-TX Ethernet port High Speed USB 2.0 Host (480 Mbps) High Speed USB 2.0 Device (480 Mbps)
Other I/O Signals	External GNSS antenna External cellular antenna External radio antenna Inclinometers and compass integrated
USER INTERFACE	
SD card slot	High Capacity microSD Card (microSDHC) up to 128GB Class 10; user accessible,fully sealed
LED Indication	On/OFF, Battery status, External power, Cellular, Bluetooth, Wi-Fi, Radio, Ethernet, Satellites, Position, Recording statuses
Buttons	On/Off button; Bluetooth On/Off; Wi-Fi On/Off; Recording On/Off

## POWER MANAGEMENT

Battery	Rechargeable, Lightweight Li-Ion battery 42.5 Wh (nom.)
Operation Time	12 hours on one charge
External Power Input	10-40 V DC
Charging	Power management notifies user when battery needs charging and protects battery from overcharging

# **TRIUMPH-3**



## EASY MANAGEMENT WITH NETVIEW&MODEM

NetView&Modem is a free application allowing the user to easily control JAVAD GNSS TRIUMPH-3 receivers, i.e. allowing efficiently managing receiver parameters and commands via a user friendly graphical interface.

## EASY MANAGEMENT WITH J-MOBILE

For setting up the base and rover may be afforded using Javad Mobile Tools (J-Mobile) and your mobile device and either the iOS or Android. You can connect your TRIUMPH-3 in field to the mobile device using WiFi connection internally implemented in your receiver.

## EASY BASE AND ROVER SETUP WITH TRIUMPH-LS

TRIUMPH-3 receiver can be used together with TRIUMPH-LS as a base or a rover to accomplish high efficient geodetic job.



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