



# TRIUMPH-NT

Revolutionary, compact, 216-channel GNSS Receiver and breakthrough, wide-screen, high-resolution handheld controller - TRIUMPH-NT is a great solution for the applications where the external GNSS antenna is needed. With the ability to process GPS, Galileo, GLONASS, QZSS, and COMPASS signals as well as SBAS, the TRIUMPH-NT receivers work with optimum signal available creating the most reliable results, saving your time and money. TRIUMPH-NT is very useful in the most of high accuracy applications, such as reference stations and Continuously Operating Reference Stations (CORS), machine navigation and control in road construction, precise agriculture, other land, aerial, and marine applications.

The receiver is equipped with external antenna connector, three connectors for mounting on tripods, monopods, poles and machines. Because of user friendly interface and revolutionary new design TRIUMPH-NT is without a rival in the industry market.

# TRIUMPH-NT

## GNSS Receiver

Total 216 channels: all-in-view GPS L1/L2/L2C/L5, Galileo E1/E5A/E5B, AltBOC, GLONASS L1/L2/L3, COMPASS L1/E5B, QZSS SBAS	
Signals Tracked	L1/L2 C/A and P Code & Carrier
Autonomous	<2 m
Static, Fast Static Accuracy	Horizontal: 0.3 cm + 0.5 ppm * base_line_length Vertical: 0.5 cm + 0.5 ppm * base_line_length
Kinematic Accuracy	Horizontal: 1 cm + 1 ppm * base_line_length Vertical: 1.5 cm + 1.5 ppm * base_line_length
RTK (OTF) Accuracy	Horizontal: 1 cm + 1 ppm * base_line_length Vertical: 1.5 cm + 1.5 ppm * base_line_length
DGPS Accuracy	< 0.25 m Post Processing < 0.5 m Real Time
Cold Start	<35 seconds
Warm Start	<5 seconds
Reacquisition	<1 second
Internal Memory	Up to 2048MB of onboard non-removable memory for data storage
Raw Data Recording	Up to 100 times per second (100Hz)
Data Type	Code and Carrier from GPS L1/L2/L2C/L5, Galileo E1/E5A, GLONASS L1/L2/L3
Real time data outputs	RTCM SC104 versions 2.x and 3.x Input/Output
ASCII Output	NMEA 0183 versions 2.x and 3.0 Output
Output Data	Code and Carrier

## Controller

Processor	OMAP3530 600MHz; 512 MB RAM and 512MB NAND Flash
Operating System	Microsoft Windows CE 6.0
Memory	512 MB
SD card slot	High Capacity microSD Card (microSDHC) up to 32GB can be used; user accessible, fully sealed
Display	Active viewing area: 4.3" diagonal (109 mm). High visibility TFT active matrix ; WVGA, 800 x 480 pixels
Touchscreen	Sealed resistive touchscreen, aingerprint-resistant oleophobic coating
Buttons	Four-way directional Navigation button Standard key functions include: Home - main screen FN -action button -/+ - Cancel (Zoom -)/Accept (Zoom +) Enter (Ok) button - activates enter function Five user programmable buttons On/Off button
Enunciators	Three LEDs: battery charging status, battery status, sleep mode
Voice recorder	integrated
Audio Output	integrated

## Environmental

Enclosure	Molded magnesium alloy and plastic, IP55
Color	Black
Operating Temperature*	-35° C to +75° C
Storage Temperature**	-40° C to +85° C
Humidity	100% condensing
Dimensions	W:178 mm x H:109 mm x D:178 mm
Weight	1700 g

\* The operating temperature of Li-Ion batteries is -30 ° C to 55° C  
\*\* The storage temperature range of Li-Ion batteries is -20 ° C to +45° C

## Power Management

Battery	Intelligent, rechargeable, lightweight Li-Ion battery pack, 63.0 Wh (nom.). Battery easily changed in field without tools Charging via power adapter
Operation Time	Operates no less than 9 hours on one charge
External Power Input	10 to 30 V power input connector for charging or direct power input
Charging	Power management notifies user when battery needs charging and protects battery from overcharging Charges in 3 to 5 hours

## Radio

GSM/GPRS/EDGE Module	Internal GSM/GPRS/EDGE quad-band module, GPRS/EDGE Class 10
SIM card slots	Two SIM cards can be used; user accessible, fully sealed

## I/O

Communication Ports	Wi-Fi (IEEE 802.11b/g) Bluetooth V2.0+EDR Class 2 supporting SPP Slave and Master Profiles Full-duplex 10BASE-T/100BASE-TX Ethernet port High Speed USB 2.0 On-The-Go port High Speed USB 2.0 Device port
Other I/O Signals	1 PPS synchronized Event Marker

Specifications are subject to change without notice



**JAVAD GNSS**  
[www.javad.com](http://www.javad.com)

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