



TRIUMPH-3

GNSS Smart Antenna



Key Features

- 874 Channels, All GNSS Constellations
- Spoofing Detection
- Advanced Multipath Mitigation
- Fast Acquisition Channels
- UHF / SS Radio / Cellular Modem
- Bluetooth 5.1
- Wi-Fi & Ethernet
- NTRIP Caster
- USB Host & Device
- 12-hour Battery Life

The TRIUMPH-3 is a compact GNSS Smart Antenna with a variety of wireless interfaces for hands-free operation. Dual-band Wi-Fi and Bluetooth allow easy cable free connection in the field. The TRIUMPH-3 complements the line of JAVAD receivers with a quick setup for base/rover operation using the internal radio or cell modem, or as an NTRIP caster.

TRIUMPH-3 Specifications



Number of Channels	874	
GNSS Constellations	GPS GLONASS Galileo BeiDou QZSS SBAS NavIC	L1 C/A, L1C (P+D), P1, P2, L2C (L+M), L5 (I+Q) L1 C/A, P1, P2, L2C, L3 (I+Q) E1 (B+C), CBOC, E5A (I+Q), E5B (I+Q), AltBoc, E6 (B+C) B1, B1C (P+D), TMBOC, B2B(I+Q) B2, B2A(I+Q), AltBoc, B3 L1C C/A, L1C (P+D), L1S, L1Sb, L2C (L+M), L5 (I+Q), L5S, L6 L1, L5 L1, L5
Position Accuracy	Autonomous (Stand alone) DGPS J-Star ¹ Single Baseline RTK Network RTK Tilt Compensated RTK Static / Fast Static	< 2m < 0.5m Horizontal: 0.100 m, Vertical: 0.200 m Horizontal: 0.008 m + 1 ppm, Vertical: 0.015 m + 1 ppm Horizontal: 0.008 m + 0.5 ppm, Vertical: 0.015 m + 0.5 ppm RTK + 5 mm + 0.5 mm / ° tilt, up to 30° Horizontal: 0.003 m + 0.1 ppm, Vertical: 0.004 m + 0.4 ppm
Time To First Fix	Cold Start Hot Start Reacquisition RTK Initialization	< 35 s < 5 s < 1 s 2 to 6 s
Cellular	4G LTE Mini Card	4G LTE Regional Modems AMER: LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev A, 1xRTT AMER / EMEA: LTE-FDD, LTE-TDD HSPA+
Radio	UHF ISM	406-470MHz, Channel Bandwidth 12.5/20/25 kHz 1 W Max., up to 38,400 bps Over Air 902-928/ 868-870 MHz (optional)
I/O	NTRIP Caster Ethernet USB Wi-Fi Bluetooth Card Slots	5 mount points, up to 256 clients 10BASE-T/100Base USB 2.0, Host (A) / Device (micro B) 802.11 a, b, g, n, d, e, i 5.1 BR/EDR & LE Dual Mode microSIM microSD Card (microSDHC) up to 128 GB, Class 10
Memory	Internal	21 GB
Data Recording	Rate	Up to 100 Hz
Power	Input Battery Operation Time	10 – 40 VDC Rechargeable, Li-Ion, 88.7 Wh (nominal) 12 hours
Physical & Environmental	Material Operating Temperature Storage Temperature Humidity Vibration Shock Dimensions Weight Ingress Protection Drop	Molded magnesium alloy and plastic -40° C to +60° C, IEC60068 -20° C to +85° C MIL-STD-810D Method 507.2 Humidity Procedure III, 95% RH MIL-STD-810G 514.7 Vibration Category 24, General & Helicopter MIL-STD-810D 516.3 Shock - Functional Procedure I 182 x 96 x 78 mm 1.25 kg IP67, IEC60529 Survives a 2m drop

1. J-Star availability is dependent on the inclusion of an L-Band antenna option.

GNSS performance is dependent on signal quality, satellite geometry (PDOP), ionospheric and tropospheric conditions, baseline length, multipath effects and RF interference. Specifications may be changed without notice.