



TRE-DUO-IMU

OEM GNSS Receiver



Key Features

- All GNSS Constellations
- NTRIP Caster / Server
- GNSS Heading & IMU Roll / Pitch
- Ethernet, USB, Serial
- CAN & Event Marker
- 1PPS & IRIG

The TRE-DUO-IMU is an all constellation OEM GNSS receiver with dual antenna GNSS Heading and an integrated MEMS IMU for roll and pitch. This GNSS + IMU combination provides RTK performance with 3D attitude for multiple applications. A 64-pin connector allows easy access to all ports and data for integrators to quickly provide time, position and attitude.

TRE-DUO-IMU Specifications



Number of Channels	874	
GNSS Constellations	GPS GLONASS GALILEO BeiDou QZSS SBAS IRNSS L-Band	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), E5A (I+Q), E5B (I+Q), AltBoc, E6 (B+C) B1, B1-2, B1C (P+D), B5A (I+Q), B2, B5B (I+Q), B3 L1 C/A, L1C(P+D), TMBOC, L2C(L+M), L5(I+Q), L6, L1S, L1Sb, L5S L1, L5 L5 1525-1560 MHz
Position Accuracy	Autonomous (Stand alone) SBAS DGPS PPP RTK Static/Fast Static Roll / Pitch / Heading ¹	< 2 m < 1 m < 0.5 m Horizontal: 0.025 m Vertical: 0.050 m Horizontal: 0.008 m + 1 ppm Vertical: 0.015 m + 1 ppm Horizontal: 0.003 m + 0.1 ppm Vertical: 0.004 m + 0.4 ppm Roll / Pitch: 0.10 deg, Heading: 0.09 deg (2 m baseline)
Network	NTRIP Caster TCP / TCPO / UDP Server NTRIP / TCP Client NTRIP Server HTTP(S) Server FTP Server / Push /SFTP	Up to 256 NTRIP Clients 5 / 256 / Unlimited Clients 2 / 2 Connections 2 NTRIP Caster Connections 1 Client 1 Client / 1 / 1 Connection
Memory	Non-removable	Up to 64 GB
Status/Interface	LEDs / Keys	'Power ON/OFF, External Command inputs (Function) 4 x External LED Drivers
Connectors	I/O GNSS Antenna	64-pin DIN41612 type B, Right Angle 2 x MMCX, +5 VDC Ports (0.2A max)
Communication	Ethernet USB Serial Time 1PPS Event Marker	Full-duplex 10BASE-T/100Base-TX 2 x High-speed USB 2.0 (480 Mbps) Dual-Role Port 2 x RS232 up to 460.8 kbps, 2 x RS232/RS422 up to 460.8 kbps 2 x CAN 2.0 IRIG 2 x 1PPS 2 x Event Marker
Power	External Input Input Voltage Power Consumption	1 x Power Input +4.5 to +40 VDC 4 W typical
Physical & Environmental	Operating Temperature Storage Temperature Humidity Shock Vibration Dimensions Weight	-40°C – +65°C -40°C – +85°C MIL-STD- 810D (method 507.2) MIL-STD- 810H (method 514.8) MIL-STD- 810H (method 516.8) 100 X 80 X 13 mm 0.070 kg

1. Using dual-antenna GNSS & IMU. Inertial roll & pitch measurements are dependent on GNSS RTK performance.

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