



FJD Trion™ V1t

RTK Rover

A NEW WAY TO MEASURE THE WORLD

FJD Trion VIt, a versatile and lightweight GNSS RTK receiver, can fast deliver accurate positions in harsh environments with global signal coverage. VIt is engineered with an Inertial Measurement Unit (IMU) that frees you up from watching and leveling the bubble when measuring.



Hi-precision built-in IMU for accurate and reliable measurement. Precision: 2.5cm. Angle: 30°. (Max: 60°)



Fixed in seconds



965 channels: GPS, GLONASS, Galileo, Beidou, QZSS, SBAS, IRNSS



Supports TRIMTALK, TRIMMARK III, TT450S, TRANSEOT and SATEL 3AS 4FSK
Distance Range: 5km typically



IP67 Rating



Low-power chipset and large-capacity battery for long battery life: Base 10hrs and Rover 15hrs typically

FJD TRION FIELD CONTROLLER E200

- 5-inch screen
- 7000 mAh, 24h battery life
- CPU 2.4GHz
- Memory 4+64 GB
- USB- Type C, OTG Support
- 1.5-meter drop test survivor



FJD TRION SURVEY

Trion Survey is an app that aids engineers in accurate measurement. It works with FJD Field Controller and FJD tablet for effort-less survey experiences. It supports Measure, Stake points, Stake lines and powerful Stake CAD function. In addition, we support Edit CAD function. The abundant functions can match with different customers requests. The concise interface and easy-to-understand icons make the measurement intuitive more than ever.



Measure



Stake points



Stake lines



Stake CAD



APPLICATION SCENARIOS



QUICK SPECS

GNSS Singal

GPS	L1, L1C/A, L2C, L2P, L5 B1I, B2I, B3I
BDS-3	B1I, B3I, B1C, B2a, B2b
GLONASS	G1, G2, G3*
Galileo	E1, E5a, E5b, E6C*, AltBOC*
QZSS	L1, L2C, L5, L1C*, L1-SALF
SBAS	L1C/A, L5*
IRNSS	L5*
L-band*	

Receiver

Size & Weight	Ø162*86 mm; 1070g
IP rating & Memory	IP67; 32GB

Battery

Battery capacity	6500 mAh
Battery life	Base 10 h, Rover 15 h typically

Ambient Environment

Operating temperature	-30 C ~ + 60 C
Storage temperature	-40 C ~ + 70 C
Humidity	100%, condensing

Positioning Performance

Time to first fix	< 45 s (cold start) < 15 s (hot start)
Signal reacquisition	< 1 s
Pseudo-range accuracy	≤ 10 cm
Carrier phase accuracy	≤ 1 mm
RTK initialization time	< 5 s (baseline length < 10 km)
Initialization reliability	> 99.9%
Channels	965
Single positioning (RMS)	Horizontal 1.5 m, vertical 3 m
Static accuracy	Horizontal: 2.5 mm+0.5 ppm, RMS Vertical: 5 mm+0.5 ppm, RMS
RTK accuracy	Horizontal: ±(8 mm+1 ppm), RMS Vertical: ±(15 mm+1 ppm), RMS
Timing accuracy	20 ns
Update rate	Raw observation data: 1, 2, 5, 10, 20 Hz Real-time positioning data: 1, 2, 5, 10, 20 Hz
Tilt Survey accuracy	30°/2.5cm (H) ,Max angle 60°
Data format	Input & output: RTCM3.X, NMEA-0183 Input: CMR, RTCM2.X

Wi-Fi

Protocol	IEEE 802.11b/g/n protocol standard
----------	------------------------------------

Internal Radio

Power consumption	1 W
Modulation type	GMSK or 4FSK
Frequency	(410-470) MHz / (902-928) MHz
Protocol	TRIMATLK, TRIMMARK III, TT450S, TRANSEOT, SateI 3AS 4FSK

Power Supply

Voltage	USB PD fast charging 30 W; Aviation plug support (9-32) V DC
---------	---

Bluetooth

Protocol	BR / EDR
----------	----------

Indicator

Type	Power, data, satellite and Bluetooth
------	--------------------------------------

I/O Ports

Type-C	Support 12 V DC Fast charge
UHF Antenna port	Support UHF antenna connection
7pin-Lemo	Support 9 - 32 V DC power input External Radio Port

Free Quote:sales.global@fjdynamics.com

FJDynamics.com



CREATE FOR A BETTER WORLD

Copyright © 2022 FJDynamics. All rights reserved.