



# FJD Trion™ V1t

RTK Rover

# A NEW WAY TO MEASURE THE WORLD

The FJD Trion VIt receiver uses a next-generation GNSS positioning module to support higher satellite tracking channels and RTK measurement accuracy and reliability in complex environments. The PPP function is added on the basis of the original function unchanged. The VIt receiver supports the PPP differential function derived from Galileo E6b, enabling continuous and stable PPP operation in areas covered by Galileo signals.



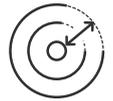
High-precision built-in IMU for accurate and reliable measurement. Precision: 2.5cm. Angle: 30°. (Max: 60°)



Fixed in seconds



1408 channels: GPS, GLONASS, Galileo, Beidou, QZSS, SBAS, IRNSS



Supports TRIMTALK, TRIMMARK III, TT450S, TRANSEOT and SATEL 3AS 4FSK



HAS-PPP



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



## FJD TRION FIELD CONTROLLER E600

- 5.5-inch screen
- 7700 mAh, 24h battery life
- CPU 2.2GHz
- Memory 4+64 GB
- USB- Type C, OTG Support
- 1.8-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&Draw



Stake Road



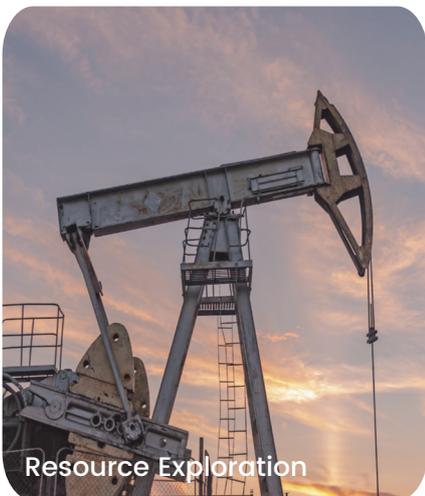
Stake DTM



Stake CAD



## APPLICATION SCENARIOS



# QUICK SPECS

## GNSS Signal

GPS	L1, L1C/A, L2C, L2P, L5
BDS	B1I, B2I, B3I, 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*
HAS-PPP	E6

## 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	< 20 s (cold start) < 10 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	1408
Single positioning (RMS)	Horizontal: ±1.5 m, vertical: ±2.5 m
Static accuracy	Horizontal: ±(2.5 mm+0.5 ppm), RMS Vertical: ±(5 mm+0.5 ppm), RMS Horizontal: ±(8 mm+1 ppm), RMS Vertical: ±(15 mm+1 ppm), RMS Horizontal: ±20cm, RMS Vertical: ±40cm, RMS
RTK accuracy	20 ns
PPP accuracy	Raw observation data: 1, 2, 5, 10, 20 Hz
Timing accuracy	Real-time positioning data: 1, 2, 5, 10, 20 Hz
Update rate	30°/2.5cm, Max angle: 60°
Tilt Survey accuracy	Input & output: RTCM3.X, NMEA-0183
Data format	Input: CMR, RTCM2.X

## Wi-Fi

Protocol	IEEE 802.11b/g/n protocol standard
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## Internal Radio

Power consumption	2 W
Modulation type	GMSK or 4FSK
Frequency	(410-470) MHz / (902-928)MHz
Protocol	TRIMATLK, TRIMMARK III, TT450S, TRANSEOT, Satel 3AS 4FSK
UHF	8-9km under ideal condition <small>*subject to fluctuations due to environmental constraints</small>

## Power Supply

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

Protocol	BR / EDR
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## Indicator

Type	Power, data, satellite and Bluetooth
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## 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](mailto:sales.global@fjdynamics.com)

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