



FJD Trion V1t

GNSS Receiver

BUILT FOR LONG-RANGE FIELD WORK

The FJD Trion V1t is designed for projects where standard RTK range isn't enough. With flexible 2W / 5W internal radio options, it supports stable long-distance operation across large worksites, reaching up to 15 km under open conditions.



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 LoRa, TRIMTALK, TRIMMARK III, TT450S, etc., strong anti-interference.



Adjustable radio power output, max. 5W internal radio.



Low-power chipset and large-capacity battery for long battery life: Base 8h, rover 20h

ACCESSORIES

When standard setup isn't enough, the V1t can be expanded to meet real job needs.

- The E600 controller supports clear, precise operation.
- An external radio extends communication range across larger sites.
- A power stick helps keep the system running through longer workdays.

FJD TRION FIELD CONTROLLER E600

- 5.5-inch display
- 7000mAh battery, up to 24 hours runtime
- 2.2 GHz CPU
- 4GB RAM + 64GB storage
- USB Type-C with OTG support
- 1.8 m drop resistance



Extend Your Communication Range

The FJ-HPR 400A is an external radio designed for long-range field communication.

With up to 28 W transmission power, it supports stable links across large worksites. Its IP67 rating and low power consumption make it suitable for long hours of outdoor use.



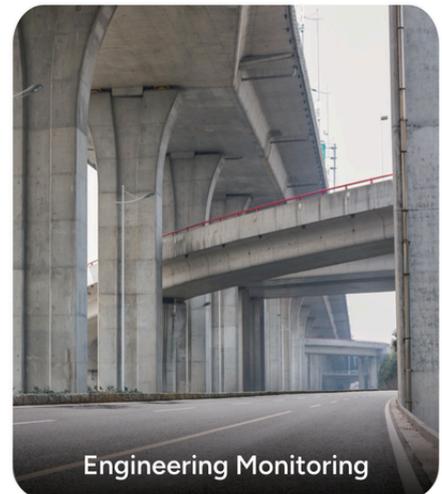
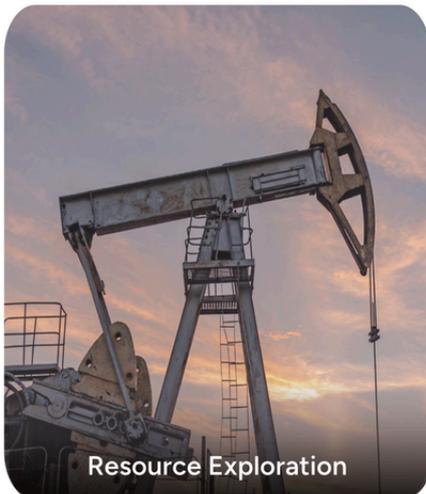
Power for Large Field Sessions

The cylindrical battery is designed for tripod-based setups and integrates into existing field configurations.

It provides additional power for extended workdays, helping keep systems running without frequent swaps or downtime.



Helps You Get It Right, Anywhere



QUICK SPECS

GNSS Signal

Channels	1408
GPS	L1, L1C/A, L2C, L2P, L5
BDS	B1I, B2I, B3I, B1I, B3I, B1C, B2a, B2b
GLONASS	G1, G2, G3
Galileo	E1, E5a, E5b, E6
QZSS	L1C/A, L1C, L2C, L5, L6
SBAS	L1C/A, L5
NavIC	L5
HAS-PPP	E6

Receiver

Size & Weight	162*86 mm;1070g
IP rating & Memory	IP67; 32GB

Battery

Battery capacity	6500 mAh
Battery life	Base 8 h, Rover 20 h (2W transmit power)

Ambient Environment

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

Positioning Performance

High-precision static(RMS)	H: 2.5mm + 0.1 ppm V: 3.5 mm + 0.04 ppm
Post-processing static(RMS)	H: 2.5mm + 0.5 ppm V: 5 mm + 0.5 ppm
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%
Single positioning (RMS)	Horizontal: ±1.5 m, Vertical: ±2.5 m
RTK accuracy(RMS)	Horizontal: ±(8 mm+1 ppm), Vertical: ±(15 mm+1 ppm)
PPP accuracy(RMS)	Horizontal: ±20 cm, Vertical: ±40 cm
Time accuracy	20ns
Update rate	Raw observation data: 1, 2, 5 Hz Real-time positioning data: 1, 2, 5 Hz
Tilt Survey accuracy	30°/2.5cm (H) ,Max angle 60°
Data format	Output: RTCM3.X, NMEA-0183 Input: CMR, RTCM2.X, RTCM3.X

Wi-Fi

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

Power consumption	2W/5W(Optional)
Modulation type	GMSK or 4FSK
Frequency	410-470 MHz / 902-928 MHz
Protocol	LoRa, TRIMTALK, TRIMMARK III, T450S, TRANSEOT, Satel 3AS 4FSK

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

