

F300

Full-FEATURED GNSS RECEIVER



The FATT Nav's F300 is a fully-Feature GNSS. Integrated high-performance IMU and visual camera make AR effects easy to stakeout. Built-in radio supports longer communication distances. The large-capacity battery allows the F300 to work continuously for 16 hours, maximizing efficiency in the project. Rugged design and waterproofing, no fear of any environment.



Full Constellations and Multi-frequency

BDS

GPS

GLONASS

Galileo

QZSS

NAVIC

Supports BDS/GPS/GLONASS/Galileo/QZSS constellations, comprehensive GNSS signal trackings, 1408 channels, and fully supports BDS-3.



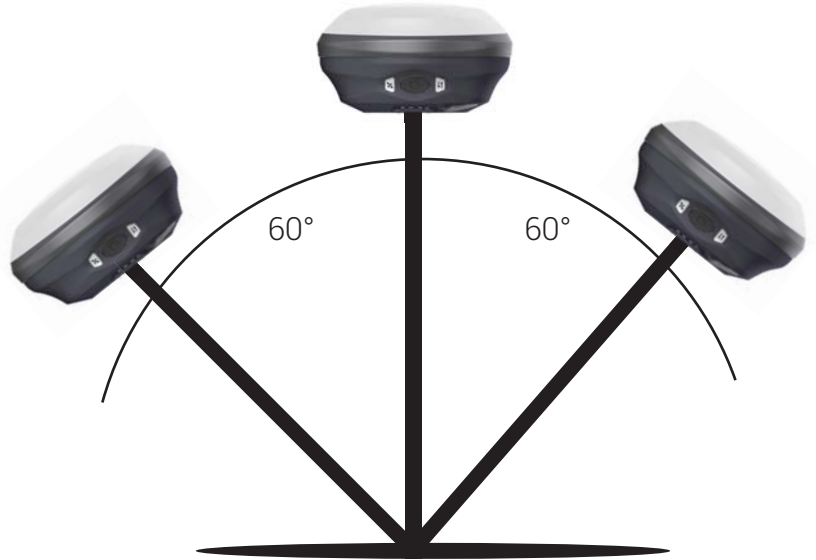
AR Stakeout

Satellite navigation, IMU and visual fusion algorithm which is not subject to electromagnetic interference, makes the stakeout accurate. Immersive real scene staking, seamless switching, fast and accurate.



Tilt Survey

High-precision tilt measurement, which can be measured immediately without the need for centering bubbles, realize walking staking and ensure reliable accuracy.

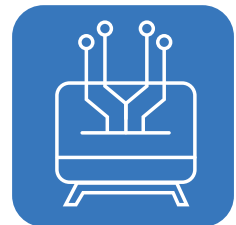


Impressive Working Endurance

Built-in 12000mAh large-capacity battery, doubles the working time to 16 hours, greatly improving project efficiency.

12000mAh
large-capacity battery

16hours
working time



Multi-protocol communication

Advanced long-range Radio Module

Multiple communication protocols make device compatibility stronger. Lora protocol further expands the scope of communication and no longer worry about communication failure.



Long distance communication range

Product Specification

GNSS Performance	
Channels	1408
Satellite tracking	<ul style="list-style-type: none"> ■ GPS: L1C/A, L1C, L1P, L2C, L2P(Y), L5 ■ BDS: B1I, B2I, B3I, B1C, B2a, B2b, ACEBOC ■ GLONASS: L 1, L2, L3 ■ GALILEO: E1, E5a, E5b, ALTB0C, E6 ■ QZSS: L1, L2, L5 ■ NavIC: L5 ■ SBAS: WAAS, GAGAN, MSAS, EGNOS, SDCM, BDS ■ L-Band: Support
Static	<ul style="list-style-type: none"> ■ H: 2.5 mm + 0.5 ppm (RMS) ■ V: 5.0 mm + 0.5 ppm (RMS)
RTK	<ul style="list-style-type: none"> ■ H: 8 mm + 1.0 ppm (RMS) ■ V: 15 mm + 1.0 ppm (RMS)
Correction data	RTCM V3.X, RTCM2.X, CMR
Data output	GGA, ZDA, GSA, GSV, GST, VTG, RMC, GLL, Binary

Internal Radio	
Type	TX & RX
Emitting power	2W
Operation range	3-5 km typically up to 15 km with optimal conditions
Frequency range	410 - 470 MHz
Channel spacing	12.5 KHz / 25 KHz / 6.25 KHz
Protocol	TRIMTAL, TRIMMK III, SOUTH, TRANSEOT, GEOTALK, GEOMK3, SATEL, HITARGET, HZSZ, PXXEOT, PCCEOT_ADL, SATEL_ADL, FARLINK, LORA

Visual Configuration	
Visual Stakeout	
Pixel	2 MP
Frame rate	25 FPS
FOV	88°

Tilt sensor	
Tilt survey	8 mm + 0.3 mm / degree
Degree	up to 60°
Update rate	400Hz

System	
OS	Linux
Internal memory	8 GB
Bluetooth	BT5.0+EDR, BLE
Wi-Fi	IEEE802.11a/b/g/n/ac

Data Interface	
TNC	Connect internal radio with antenna
Type-C	Data transmission or charge
SIM card	√

Physical & Electrical	
Dimension	Ø134 mm × 72.5 mm
Weight	800 g
Operating temperature	-30 °C ~ 60 °C
Storage temperature	-40 °C ~ 80 °C
Water / dust proof	IP67
Humidity	up to 100%
Battery	Built-in, Lithium-ion battery, 3.65V DC/1200mAh
Voltage	5-pin: 9 - 28V DC 2A Type-C: PD 12V/1.5A
Working time	20h(Static mode), 16h(UHF Rover mode)
Indicators	Satellites, datalink, power
Button	Power button, function button



Forest it Design

Forest it Design is a leading provider of rugged mobile computers, all-in-One PC:s, measurement instruments and GPS/GNSS solutions. The company has offices in Sweden, UK, Germany and Finland.

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