

# F200

## HIGH PERFORMANCE GNSS RECEIVER



The F200 is a lightweight and rugged IP67 design that allows it to handle complex tasks easily in harsh environments. Built-in radio, RTK auxiliary function and 60° tilt IMU function make it the best choice for surveying and mapping projects.

### Lightweight Design

Lightweight and sturdy design, easy to carry in a variety of complex environments.

### Tilt Survey

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

### Web UI

Users can view position status, set up working mode, download data, and upgrade firmware through smartphones, tablets, or PC.

### Full Constellations and Multi-frequency

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

# Product Specification



## F200

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

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

Data Interface	
TNC	Connect internal radio with antenna
Type-C	Data transmission or charge
Update rate	400Hz
5-pin port	<ul style="list-style-type: none"> <li>Connect to external radio &amp; external power</li> <li>NMEA output</li> </ul>
SIM card	√
Supported band	Supported LTE-cat1 LTE FDD: B1/B2/B3/B4/B5/B7/B8/B18/B19/B20/ B25/B26/B28 LTE TDD: B34/B38/B39/B40/B41 GSM: 850/900/1800/1900

1: It varies with the obstacle and terrain.

System	
OS	Linux
Internal memory	8 GB
Bluetooth	BT5.0+EDR, BLE
Wi-Fi	802.11 b/g/n
Web UI	Supported

Internal Radio	
Type	TX & RX
Emitting power	1W
Operation range	3-5 km typically <sup>1</sup>
Frequency range	410 - 470 MHz
Channel spacing	6.25 KHz / 12.5 KHz / 25 KHz
Protocol	TRIMTALK 450s, TRIMTALK, TRIMMK III, PCC-GMSK, PCC-4FSK, SOUTH, TRANSEOT, GEOTALK, GEOMARK, SATEL, HITARGET, HZSZ, PCCFST, PCCEOT_AD_L, SATEL_AD_L

Physical	
Dimension	Ø152 mm × 92 mm
Weight	945 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, 3.6V DC/12000mAh
Voltage	5-pin: 15V DC, 2A Type-C: PD 12V DC, 1.5A
Working time	up to 24 hours as rover mode
Indicators	Satellites, datalink, power, Bluetooth
Button	Power button, function button
Voice	Supported



#### 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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