

GNSS RECEIVER F90



- › The F90 overturns the traditional and enlightens the future!
- › Multi-Constellations with L-Band and SBAS
- › GNSS measurement technology revolution



The F90 tracks all possible GNSS satellites available now and in the future, thereby providing maximum performance for accuracy and real-time measurements. Now with free Trimble XFILL Function.

Highly integrated internal components

With its innovative technology, the F90 incorporates the latest in features such as: Multi-GNSS, Multi-Frequency, 4G, Bluetooth, Wi-Fi, internal memory and an outstanding GNSS Antenna.

Third generation tilt surveying technology

Inserted with high-sensitive E-bubble and brand-new tilt, the F90 is calibration-free. Immune to magnetic disturbance and free from limitation of tilt angles, the F90 can measure points where a vertical placement of the pole is not possible such as house corners.

All protocol compatible internal radio

Our independent R & D TRM series internal radio, enables frequency band change ranges from 410-470MHz. The F90 is able to work to a distance up to of 5 kilometers with a 1 Watt radio.

4G Network

F90 with its advanced 4G module, guarantee 4G network can transmit world-widely. This results more convenient and stable network communication. Will alarm immediately.

SPECIFICATIONS

Multi-Connectivity and WEB UI Control

Distinguished from former GNSS, F90 provides two connecting methods for receiver and controller---Bluetooth connection and Wi-Fi connection. Data transmission proves to be more stable with these new connecting ways.

The second generation WEB UI included in the F90 is more convenient and is fully compatible with all devices and browsers.

Long Life Battery

Included are 2 smart Lithium Batteries that are also compatible with our SXPad 1000P. Thanks to a new engineering, the battery keeps its charge 20% longer and the power level can be viewed at the press of a button.

Weight & Dimension

Without affecting accuracy and efficiency, this innovative GNSS Receiver is made extremely light and small. Equipped with magnesium alloy fuselage, the F90 weighs only 1 kg and measures only 140mm x 157mm x 76mm.

GNSS

GPS Board	BD 990
Channels	336
Satellites	GPS : L1 C/A, L2C, L2E, L5 GLONASS : L1 C/A, L2C, L3 BeiDou : B1/B2/B3 Galileo : E1/E5 AltBOC/E5a/E5b/E6 IRNSS : L5 SBAS : L1/L5 QZSS : L1C/A, L1C, L2C, L5
Update rate	50 Hz
Static accuracy	Horizontal ± 2.5 mm + 1 ppm RMS Vertical ± 5 mm + 1 ppm RMS
RTK accuracy	Horizontal ± 8 mm + 1 ppm RMS Vertical ± 15 mm + 1 ppm RMS

POWER

Battery	Dual Batteries, 2 x 7.2V/3400mAh Can work at least 10 hours
Input	9~28V DC

INCLUDED ACCESSORIES



Rugged carrying case



2 lithium-ion batteries
3400 mAh



Charger li-Ion
8.4 volts



Uhf antenna
410-470 mhz



Pole Clamp with
Controller Holder



Measuring Tape

SYSTEM

OS	Linux
Memory	Internal 8G, TF Extended, Max \geq 32G
Bluetooth	V2.1+EDR / V4.1 Dual Mode Class2
Wi-Fi	802.11 b/g/n
4G	EC25-E, EC25-A : LTE, WCDMA, GSM
Data format	CMR, CMR+, RTCM 2,3, RTCM3.x, RTCA
Internal UHF	TRM101 Power 1 Watt Frequency : 410-470 MHz Work Distance : 5km in good environment
Protocol	SATEL, PCC-GMSK, TrimTalk 450S, South, TrimMark III(19200), South 19200
Electric Bubble	Supports tilt survey

INTERFACE

TNC	For UHF Antenna
5 pins	External radio and external power
7 pins	NMEA output + USB Port
Others	SIM slot and TF slot
Buttons	Power button with indicators
Indicator	4 indicators, Satellites, Datalink, Bluetooth, WIFI Status
Language	Supports TTS Multi language voice

PHYSICAL

Dimensions	157 mm x 76 mm
Weight	1.2KG with 2 batteries inside

ENVIRONMENT

Work Temperature	-30°C - + 65°C
Stock Temperature	-40°C - + 80°C
Protection	IP67
Shock	Withstands 2 meters pole drop, 1.2m drop without pole
Humidity	100 %

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