TECHNICAL SPECIFICATIONS

GNSS Performance [1]	
Channels	1608 channels
GPS	L1C/A, L2C, L2P(Y), L5
GLONASS	L1, L2, L3*
Galileo	E1, E5a, E5b, E6*
BeiDou	B1I, B2I, B3I, B1C, B2a, B2b*
QZSS	L1C/A, L1C, L2C, L5
NavIC/ IRNSS	L5
SBAS	L1, L5*
PPP	Support PPP-B2b, E6B-HAS H: 10 cm | V: 20 cm

GNSS Accuracies [2]	
Real time kinematic (RTK)	Horizontal: 8 mm + 1 ppm RMS Vertical: 15 mm + 1 ppm RMS Initialization time: < 10 s Initialization reliability: >99.9%
Post - processing kinematics (PPK)	Horizontal: 3 mm + 1 ppm RMS Vertical: 5 mm + 1 ppm RMS
Post - processing static	Horizontal: 2.5 mm+ 0.5 ppm RMS Vertical: 5 mm+ 0.5 ppm RMS
Code differential	Horizontal: 0.4 m RMS Vertical: 0.8 m RMS
Autonomous	Horizontal: 1.5 m RMS Vertical: 2.5 m RMS
Vision stakeout	H: 8 mm + 1 ppm RMS V: 15 mm + 1 ppm RMS
Positioning rate[3]	1 Hz, 5 Hz and 10 Hz
Time to first fix[4]	Cold start: < 45 s Hot start: < 10 s Signal re-acquisition: < 1 s

IMU Sensor	
IMU Type	4D AUTO-IMU
IMU update rate	200Hz
IMU tilt angle	0-60°
Additional horizontal pole-tilt	Typically less than 2.5 cm within 30°

Hardware	
Size (L x W x H)	Φ107 mm x 59 mm(Φ 4.21 in × 2.32 in)
Weight	450 g (0.99 lb)
Front panel	2 synchronized LED + 1 Button
Environment	Operating: -40°C to +65°C (-40°F to +149°F) Storage: -40°C to +85°C (-40°F to +185°F)
Humidity	100% non-condensation
Ingress protection	IP68[5] (according to IEC 60529)
Shock resistance grade	IK08
Drop	Survive a 2-meter pole drop
Tilt sensor	Calibration-free IMU for pole-tilt compensation. Immune to magnetic disturbance

Camera	
Sensor pixels	2 MP
Aperture	F2.4
Video frame rate	30 fps
Feature	Vision stakeout

Communication	
Wi-Fi	Wi-Fi 2.4G 802.11b/g/n Wi-Fi 5G 802.11ac
Bluetooth ®	v 4.2, backward compatible
Others	NFC for device touch pairing
Ports	1 x USB Type-C port (external power, data download, OTG firmware update) 1 x UHF antenna port (SMA female)
UHF radio[6]	Standard Internal Tx/Rx[7]: 410 - 470 MHz Transmit Power: 0.5 W, 1 W Protocol:EFIX, Transparent, TT450, Satel[8] Link rate: 9,600 bps to 19,200 bps Range: Typical 3km, up to 5 km with optimal conditions
Data formats	RTCM2.x, RTCM3.x, CMR input / output, Full Star ECN, RINEX 2.11, 3.02 NMEA 0183 output NTRIP Client, NTRIP Caster
Data storage	8 GB high-speed memory

Electrical	
Charging time	Full charge in 4.5 hours
Operating time on internal battery [9]	UHF/ 4G RTK Rover w/o camera: up to 17 h Vision Stakeout: up to 10 h Static: up to 22 h
External power input	Type-C 5 V / 2 A

*All specifications are subject to change without notice.
(1) Compliant, but subject to availability of BDS ICD, GLONASS, Galileo, QZSS and IRNSS commercial service definition. GLONASS L3, Galileo E6, Galileo E6 High Accuracy Service (HAS), BDS B2b and SBAS L5 will be provided through future firmware upgrade.
(2) Accuracy and reliability are determined under open sky, free of multipaths, optimal GNSS geometry and atmospheric condition. Performances assume minimum of 5 satellites, follow up of recommended general GPS practices.
(3) Compliant and 10 Hz to be provided through future firmware upgrade.
(4) Typical observed values.
(5) Splash, water, and dust resistant and were tested under controlled laboratory conditions with a rating of IP68 under IEC standard 60529.
(6) The use of UHF datalink may be subject to local regulations. Users must ensure that the device is not operated without the permission of the local authorities on frequencies or power output other than those specifically reserved and intended for use without required permit.
(7) Supported after the product upgrade in April 2025. For details, please kindly contact authorized EFIX dealer or regional business team.
(8) Compliant and Satel protocol to be provided through future firmware upgrade.
(9) Battery life is subject to operating temperature.

Shanghai EFIX Geomatics Co.,Ltd.
No. 577 Songying Road, Qingpu District, Shanghai 201703, China
Sales@efix-geo.com
www.efix-geo.com

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EFIX
Boost Stakeout Efficiency By 50%

EFIX
Boost Stakeout Efficiency By 50%

F6

COMPACT PALM-SIZE VISION IMU-RTK

EFIX

Boost Stakeout Efficiency By 50%

AR VISION STAKEOUT

4D AUTO-IMU

PALM-SIZE

FULL-STAR

BOOST STAKEOUT EFFICIENCY BY 50%

The EFIX F6 is a compact, lightweight GNSS receiver designed to deliver top-tier precision and efficiency for professional surveyors. With its 1608-channel GNSS, Full-Star technology, and 4D AUTO-IMU, F6 ensures continuous accuracy in any terrain.

The real-time AR vision stakeout feature simplifies complex staking tasks, boosting efficiency by 50%. Its lightweight 450g design, combined with IP68 durability, makes it ideal for fieldwork under extreme conditions. Whether it's for real-time RTK or challenging environments, F6 provides surveyors with the tools to complete projects faster and more accurately than ever before.

450 G ONLY, 40% LIGHTER, 50% SMALLER

- Compact design for easy portability, perfect for challenging field conditions.
- Lightweight yet robust, surviving a 2-meter pole drop with IP68 and IK08 protection.

1608-CHANNEL GNSS, FULL-STAR TECH FOR FASTER RTK

- Tracks full constellations and frequency points for enhanced positioning.
- Full-Star technology optimizes signal acquisition, boosting RTK signal by 60%.

50% FASTER STAKING WITH REAL-TIME AR VISION STAKEOUT

- 2 MP camera with F2.4 aperture and 30 fps for intuitive AR vision stakeout with large arrows and real-time distance indication.
- Immersive and vividly displays stakeout points in eField software, boosting efficiency by 50%.

INTEGRATED 4D AUTO-IMU FOR CONTINUOUS ACCURACY

- Tilt compensation up to 60° for continuous accuracy.
- Automatic initialization during motion eliminates manual setup.
- 200 Hz update rate ensures smooth, accurate measurements on the move.

HIGH-CAPACITY LI-ION BATTERY FOR 17 HOURS OF ENDURANCE.

- Up to 17 hours of operation in UHF/4G RTK mode and 10 hours during vision stakeout.
- Fully charges in 4.5 hours via Type-C, supports power banks.

eField: EMPOWER ENGINEERING & CONSTRUCTION FIELD WORK

- Map survey: Survey all terrain types with corresponding line styles.
- CAD editing: Modify CAD drawings in the field, saving time on back-office operations.
- CAD stakeout: Select and stake points and lines directly from CAD drawings.
- Earthwork volume calculation: 3D view with 99.98% accuracy.
- User-friendly interface: Quick onboarding for efficient use.