



FX6i

Next-generation RTK receiver with tilt compensation & Laser

Professional-grade accuracy with IMU tilt compensation up to 60°.

Works with NTRIP corrections and CORS networks

Pairs with Airace One app for Android

Key features

MILLIMETRE PRECISE DATA

Works with any NTRIP corrections network for Millimetre-level positioning. Achieves RTK horizontal accuracy of 3mm + 0.5ppm with a fix in under 5 seconds.

LoRA RADIO

Up To 5 Km Range

Built-in 1W LoRa radio modem delivers long-range RTK corrections — covering distances that traditional UHF radios can't match, at a fraction of the power consumption.

LASER

Professional-grade accuracy with an integrated laser module and up to 60° IMU tilt compensation.

SIMPLE RTK SETUP



1. Connect via Bluetooth in Airace One



2. Enter NTRIP corrections credentials



3. Collect your first point

RELIABLE BATTERY

24 Hours Of Work

Charges fully in under 4 hours via USB Type-C — from any vehicle charger or power bank.

2000+ Cycles

10,000 mAh lithium-ion battery maintains original capacity across thousands of charges.

RUGGED AND FIELD-READY

479 G · IP67 · MIL-STD-810F

Fully waterproof, dustproof, and tested for vibration and shock on heavy machinery and construction sites.

-40°C To +65°C

Reliable performance across extreme climates.



COMES WITH SOFTWARE FOR THE FIELD AND THE OFFICE

Airace One

Android

The Airace One mobile app lets you quickly set up the FX6i and start collecting or staking out points, right from your Android device.

- ✓ Multiple Coordinate System Support
- ✓ Millimetre-Precise Coordinate Recording
- ✓ Export & Import In CSV, DXF, And Shapefile
- ✓ Share Data Via Email Or Messaging
- ✓ COGO Functions And Essential Survey Tools



Airace OneHub

OneHub provides complete ground-to-cloud synergy, manage, analyse, and collaborate on survey data from anywhere.

- ✓ Image Digitization & CAD Tools
- ✓ GIS Functions
- ✓ Multiple Geoid Model Support
- ✓ Seamless RINEX File Processing
- ✓ Export In CSV, PDF, SHP, KML, And DXF



PRODUCT SPECIFICATION

RECEIVER SPECIFICATION

SIGNAL TRACKING & SIGNAL RECEIVED GPS - L1, L1 C/A, L2, L2 C, L2 E, L2 P, L5
GLONASS - L1, L2, L2 C/A, L2 P, L3
BEIDOU - B1, B2, B2a, B2b, B3
GALILEO - E1, E5 a, E5 b, E5 ab, EG
SBAS WAAS, EGNOS, BDSBAS, MSAS,
GAGAN, SDCM
QZSS - L1c/a, L1c, L5, L2c, L6
NAVIC - NAVIC L5, L-BAND

NO. OF CHANNELS 1040+ channels

UPDATE RATE Up to 20 Hz

MEMORY Internal memory of 32 GB

RTK & PPK BASELINE Up to 100KM

PPP POSITIONING Any point on Earth

IMU POSITIONING 9 DOF, Calibration Free (0° - 60° tilt compensation
RTK Mode) +/- mm +0.4mm/°

LASER POSITIONING ≤ 5cm (20m range, ≤ 45° tilt in RTK mode)

PHYSICAL SPECIFICATION

DIMENSIONS 119.5 mm (H) X 138.5mm (W) x 138.5 mm (L)

WEIGHT 479 grams

OPERATING TEMPERATURE - 40°C to 65°C

STORAGE TEMPERATURE - 40°C to 85°C

WATER/DUST PROOF IP67 rated (waterproof and dustproof)

HUMIDITY 5% to 95% non-condensing

DUST TEST COMPLIANCE IEC-60529

WATER INTRUSION TEST COMPLIANCE IEC-60529

VIBRATION/SHOCK TEST COMPLIANCE MIL-STD-810 F

TESTING LAB NABL ACCREDITED

DATA FORMAT

DIMENSIONS RTCM 2.X, RTCM 3.0, RTCM 3.1, RTCM 3.2, VRS, NTRIP NMEA 0183, LLH/XYZ RINEX, NMEA

COMMUNICATION

BLUETOOTH Bluetooth 5.0 for wireless connectivity

Wi-Fi Built-in Wi-Fi 2.4 GHz, 802.11 b/g/n for network communication & data transfer

NETWORK COMMUNICATION 4G (Via certified android controller) TDD-LTE/ FDD-LTE/ WCDMA/ GPRS/ GSM (900MHZ & 1800 MHz), WCDMA 2100MHZ/900MHZ, LTE BAND 1,3,7,8,20

TYPE C USB Type C port for charging & data transfer

NMEA OUTPUT NMEA-0183 output for compatibility with external devices over Bluetooth

STARTUP TIME 5 SECONDS

RADIO RANGE Upto 5 kms

POWER SUPPLY

RECHARGEABLE BATTERY Lithium-ion battery 10,000 mAh (included)

OPERATING PERIOD Rover Mode - 24 hours Base Mode - 15 hours

CHARGING TIME Less than 4 hrs

POSITIONING PERFORMANCE

HIGH PRECISION STATIC (PHASE) LONG OBSERVATION 3 mm + 0.1 ppm (horizontal)
3.5 mm + 0.4 ppm (vertical)

FAST STATIC/PPP 3 mm + 0.5 ppm (horizontal)
5 mm + 0.5 ppm (vertical)

REAL TIME KINEMATIC (RTK) 6 mm + 0.5 ppm (horizontal)
10 mm + 1 ppm (vertical)

TILT RTK+5mm+0.4mm/* tilt (up to 60°)RMS

RTK-NETWORK/CORS 6 mm + 0.5 ppm (horizontal)
10 mm + 1 ppm (vertical)

PPP 4 cm+1ppm or better with Network RT(Horizontal+ Vertical)

LASER RTK ≤ 5cm (20m range, ≤ 45° tilt in RTK mode)

DGPS ACCURACY 25 cm + 1 ppm RMS (horizontal)
40 cm + 1 ppm RMS (vertical)
SBAS: typically <2m 3DRMS RTOS