PRECISE

PRECISE BASE2

Enjoy a PRECISE, RELIABLE, and EASY experience!

Ultra-portable long-range GNSS base station.

Super-high Fix Rate
99.9%

MATRIX
Enhanced by
the MATRIX ALGORITHM

All You Need for Surveying, All in One.

Think PRECISE!

WWW.PRECISE-GEO.COM
SALES@precise-geo.com
@PRECISE-GEO

“**PRECISE BASE2**
Ultra-portable long-range GNSS base station.”

SPEED

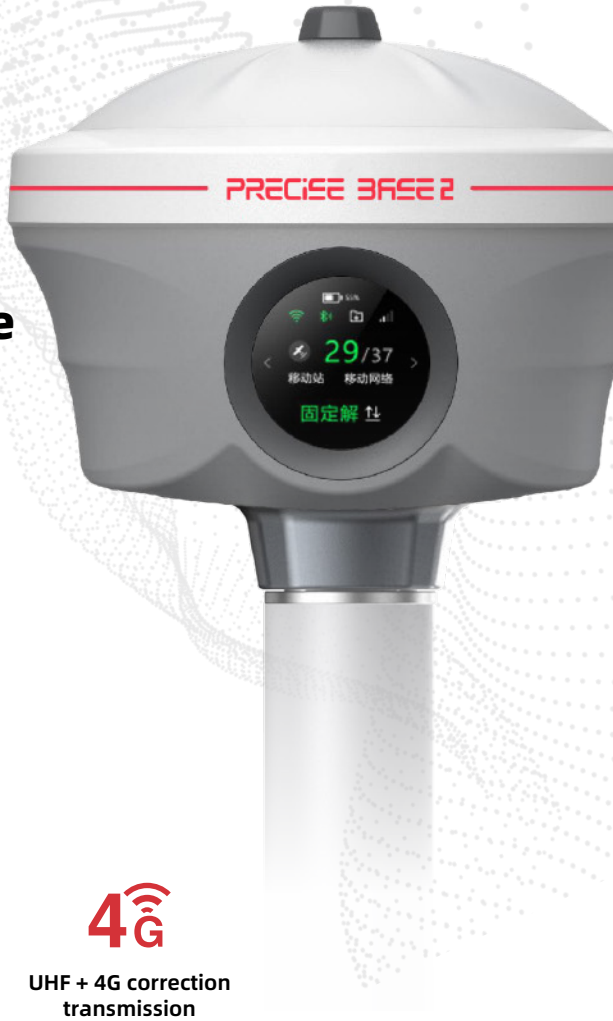
Faster Field Readiness

Start work sooner with a base station engineered to reduce setup time and eliminate unnecessary equipment. Ideal for workflows where every minute saved at setup compounds into meaningful productivity throughout the day.

Integrated Design
Fully integrated form factor with no external radios or cables

Lightweight Mobility
Over 70% lighter than conventional base-radio configurations

Rapid Deployment
Deployment efficiency improved by up to three times



RANGE

Confident Long-Distance Performance

Deliver stable RTK coverage across large and varied environments with powerful long-range radio capability. Built to maintain dependable positioning where distance, terrain, and obstructions typically challenge performance.

5W FarRadio UHF
Stronger penetration and longer-range signal stability

Extended Coverage
Up to 30 km in open environments with consistent performance

Terrain Adaptability
Robust behaviour across suburban, mixed, and uneven terrain

Reliable Links
Engineered to hold FIX where conventional radios begin to weaken

Ultra-portable integrated design

Built-in 5W FarRadio UHF

30 km
Up to 30 km long-range coverage

12
12+ hours continuous runtime

4G
UHF + 4G correction transmission

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Ultra-portable long-range GNSS base station.”

ENDURANCE

All-Day Operational Stability

Sustain uninterrupted productivity with an energy-optimized architecture designed for full-day use. A dependable power foundation that removes the need for mid-day exchanges or external power systems.

12-Hour Runtime for Base Mode
Continuous RTK operation that lasts an entire workday

Power Efficiency
Low-consumption UHF design optimized for long sessions

Zero Interruptions
No spare batteries or external power cables required

DURABILITY

Built for Demanding Sites

Perform with confidence in environments where equipment must withstand the unexpected. Engineered to endure weather, impact, vibration, and interference–so reliability remains constant even when conditions do not.

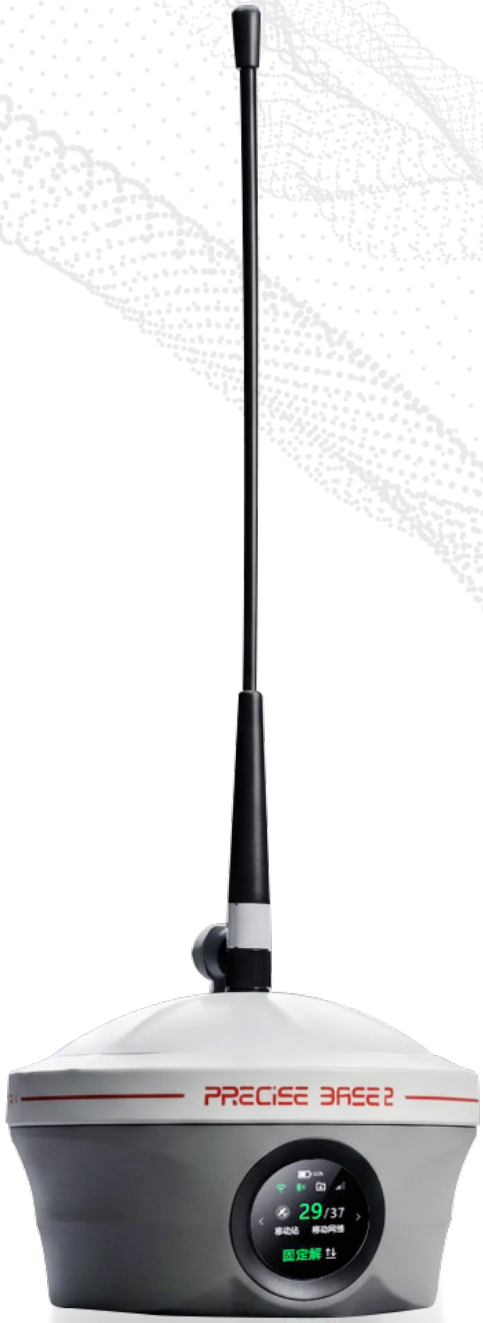
IP67 Protection
Fully sealed against water, dust, and environmental exposure

Magnesium-Alloy Body
Strong yet lightweight structural durability

Impact Resistance
Tested to withstand a 2-meter drop onto hard surfaces

Advanced GNSS Engine
1608-channel multi-constellation tracking with anti-multipath

Interference Self-Test
Identifies cleaner UHF channels for more stable FIX results



1608-channel multi-GNSS tracking

RTCM 3.x compatibility

8 GB onboard storage

IP67 rugged protection

Magnesium alloy housing

Technical Parameters

GNSS Configuration

Channel Count	1608 channels
Satellite Tracking	GPS:L1C/A/L2P(Y)/L2C/L5 GLONASS:L1/L2 BDS:B1I/B2I/B3I/BIC/B2a/B2b Galileo:El/E5a/E5b/E6 QZSS:L1/L2/L5/L6 SBAS:L1 NavIC:L5
Output Frequency	Up to 50Hz
Operating System	Linux
Initialization Time	<5s(typical)
Initialization Reliability	99.99%
Static Horizontal Accuracy	±(2.5mm+0.5x10-6xD)
Static Elevation Accuracy	±(5mm+0.5x10-6xD)
RTK Horizontal Accuracy	±(8mm+1.0x10-6xD)
RTK Elevation Accuracy	±(15mm+1.0x10-6xD)

INS Characteristics

INS	Supported
INS Accuracy	Accuracy <2cm within 60°
INS Tilt Angle	0° ~ 120°

Data Formats

Differential Data	RTCM2.X、RTCM3.X
GPS Output Data Format	NMEA 0183, Binary Code

Function Configuration

Tilt Measurement	Supported
PPK Measurement	Supported
Buzzer	Supported
Voice	Supported
NFC	NFC Flash Connect

Physical Characteristics

Dimensions	152*152*103MM (without TNC dust cap)
Weight	1.308kg
Operating Temperature	-45℃ ~ +75℃
Storage Temperature	-55℃ ~ +85℃
Water & Dust Resistance	IP67
Impact Resistance	IK08
Drop Resistance	Resistant to drops from a 2-meter pole

Static Storage

Static Data Format	TXT
Storage Capacity	32G

Electrical Specifications

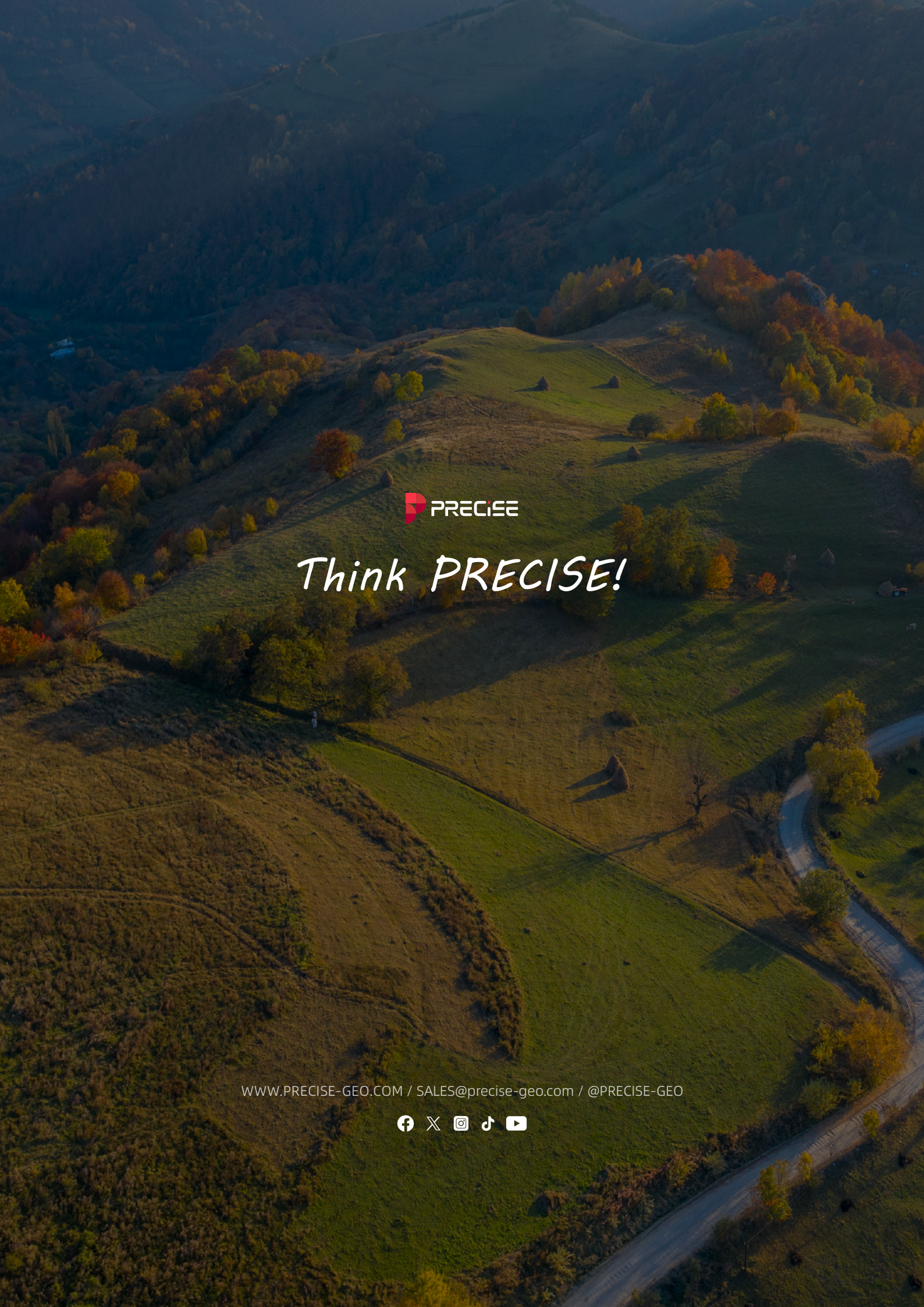
Battery Capacity	7.2V, 13200mAh battery
Operating Time	36 hours in mobile CORS mode 12 hours in base station mode (common protocol)

Data Communication

I/O Interface	1 USB Type-C, supports charging 1 TNC radio antenna interface 1 five-pin Lemo interface (9V-14V) 1 NanoSIM card socket 1 button
Wireless Communication Built-in Network	Supports Bluetooth, handheld 4G, Wi-Fi, built-in 4G-LTE, WEB LTE-TDD B38/B40/B41 LTE-FDD B1/B3/B5/B7/B8/B20 UMTS/HSPA+ B1/B8 GSM/GPRS/EDGE 900/1800 MHz
Built-in Radio Power	Universal transceiver radio + Lora (5W)
Built-in Radio Frequency	410-470MHZ
Communication Protocol	TRIMTALK450S，TRIMMARKIII， SOUTH9600，SOUTH19200,SATEL-4FSK TRIMTALK4800,LORA11000

LCD Display

Size	1.39 inch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