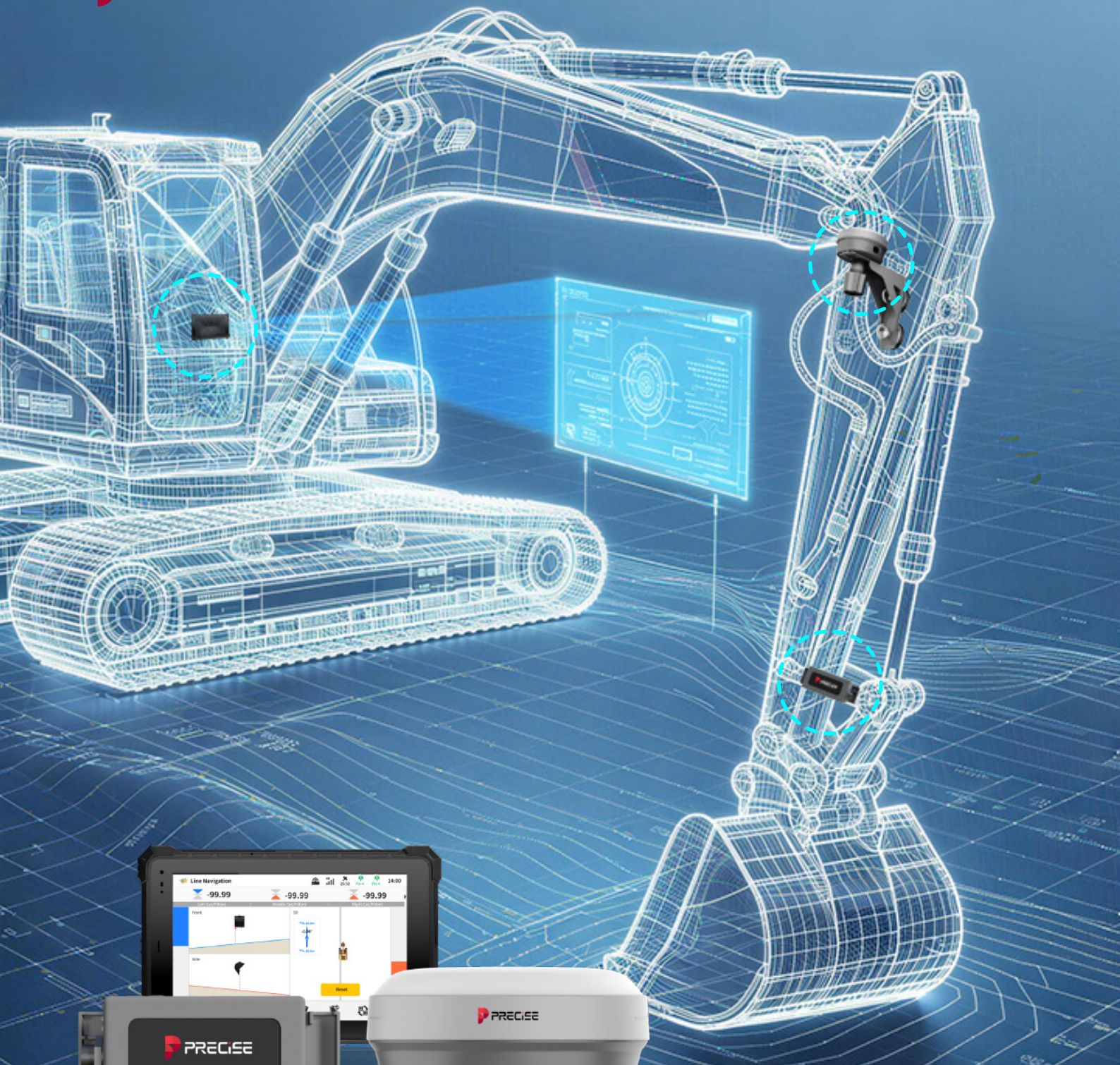




PRECISE E3D

EXCAVATOR GUIDANCE SYSTEM

PRECISE E3D

MAKE YOUR WORK EASIER

E3D is a wireless excavator guidance system with 3 cm accuracy (angle $\leq 60^\circ$). Designed for simplicity, it allows even beginners to operate with ease. Its modular design enables quick switching between machines.



Multi-GNSS Support



Accuracy $\pm 3\text{cm}$
(Tilt $\leq 60^\circ$ from vertical)



AR Camera Guidance
Real-time 3D Mapping



Multi-Purpose
Surveying & Construction
in One System



Wireless Connectivity
BT, Wi-Fi



Integrated 4G Modem
LTE-FDD, LTE-TDD, WCDMA
GSM/EDGE



AIoT Connectivity
Seamless Data Sync



Quick Setup
10 min Install
25 min Calibration

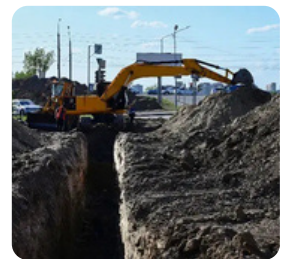
Leveling

Set a unified elevation for precise leveling, ensuring a consistent surface — ideal for land leveling, factory site grading, or sludge cleanup



Line Guidance

Set straight-line elevation in software for trenching or channel excavation, ideal for drainage pipeline installation and trench excavation.



Slope Construction

Software-defined longitudinal and cross slopes enable one-pass slope forming for embankments, riverbanks, and roadbeds.



AR Guidance

Uses a camera to overlay bucket paths, design lines, and measurements for precise operation.

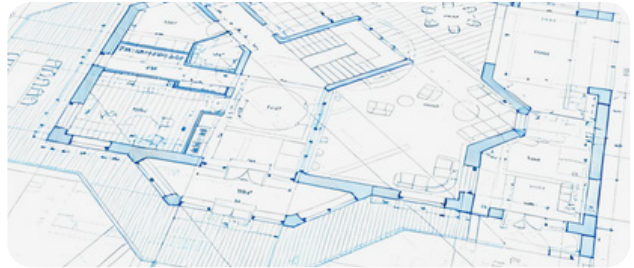


Global Coordinate Systems

6,000+ predefined coordinate systems worldwide. Grid and geoid models are downloaded online for instant use and fast configuration in new working areas.

Multi-Layer Support

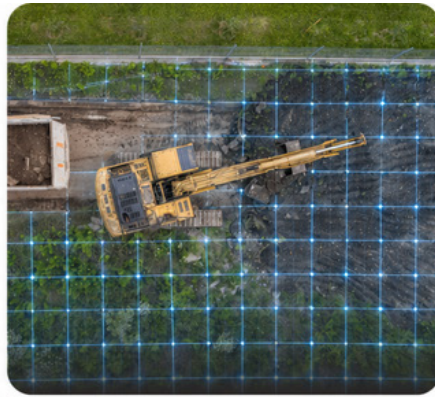
Supports DWG, DXF, SHP, KML, and XML data formats, with efficient layer management and rendering for smooth multi-layer workflows.



APPLICATION SCENARIOS



Farmland Drainage & Channel Construction



Land Leveling & Field Preparation



Roadbed & Subgrade Construction



Road Alignment & Drainage Works



Slope & Embankment Construction



Solar PV Pile Layout & Installation

SPECIFICATIONS

Receiver

GNSS

Channels	1408 channels
GPS	L1A, L1C, L2C, L2P, L5
GLONASS	L1, L2, L3
BeiDou	B1I, B2I, B1C, B2a, B2b
Galileo	E1, E5a, E5b, E6
QZSS	L1, L2C, L5, L6*
IRNSS	L5*
SBAS	L1 C/A
HAS-PPP	E6

*Supported by a firmware upgrade.

Camera

Sensor resolution	Forward: 5 MP, Downward: 5 MP
Field of view	83°

Hardware

Temperature	Operating: -35°C to +60°C; Storage: -40°C to +70°C
Ingress protection	IP68, dustproof, protected from continuous immersion to a depth of 1 m
Li-ion battery capacity	Built-in battery 7.4V/4900mAh & 30W PD Fast Charge

IMU

Base Dimensions	139×40×12mm (L×W×H)
IMU Dimensions	110×52×52mm (L×W×H)
Battery	3.7V/6400mAh & 12W PD Fast Charge
Operating Time	84 hours continuous operation
Operating Temperature	-40°C to +60°C
Storage Temperature	-40°C to +70°C
Ingress protection	IP 67
Gyroscope Resolution	0.0076 °/s
Accelerometer Resolution	0.0916 mg
BT Protocol	BLE 5.1

Communications and Data Storage

SIM card type	Nano-SIM card
Network modem	TDD-LTE, FDD-LTE, WCDMA, EDGE, GPRS, GSM
Wi-Fi	2.4 GHz, 802.11b/g/n
Wireless connection	NFC for device
BT	BT4.2 & BLE
Ports	7-pin LEMO port (External radio) UHF antenna port USB Type-C port
Built-in UHF radio	Rx/tX:(410-470)MHz/(902-928MHz) Protocol: TRIMTALK, TRIMMARK III, TT450S, TRANSEOT, Satel 3AS 4FSK, Lora Link rate: 9,600 bps to 19,200 bps
Data storage	32 GB internal memory

Operating time on internal battery	Rover 15 h, Base 10 h Static: > 25 h
External power input	9-32V DC
Dimensions (DxH)	130×68 mm
Weight	Approximately 800g

T10 Tablet

Product size	251×170×17mm
Weight	<700g
System	Android 15
RAM	4GB
Flash	64GB
BT	Support
Wi-Fi	Support

Note: Battery life may vary depending on operating conditions, including environment, temperature, and usage patterns.

RTK Magnetic Holder

Dimensions	216×203×80mm(L×W×H)
Weight	0.8Kg