e-survey

eScan M1

Anywhere You Go

The combination of zero-processing algorithms and anti-fuzzy technology balances speed and accuracy.
Industry-leading portability, breaking through the traditional device bulky limitations.
With “high efficiency, precision, lightweight and openness” as the core, it offers an optimal user experience from data collection to application landing.

Laser

Real Time Data

Zero processing after scanning, point cloud exported for immediate use.

True Natural Colored

Industrial-grade cameras equipped with advanced shutter technology eliminate motion blur.

Modular Design

The Type-C port supports the expansion of external devices such as panoramic cameras and RTKs.

Lightweight and Easy to Use

Weighing only 560g, the simple operation interface makes it quick to master the use of the device.

Website & Social media

Product Specification

eScan M1

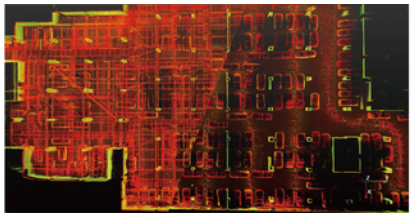
Anywhere You Go

Device Performance	
Dimensions(Main Unit)	115 mm X 110 mm X 83 mm
Weight (no battery)	560 g
Operating Time	1.5h
Battery Capacity	5000mAh
Operating Temperature	-20℃ ~ 50℃
Connection Mode	Wifi (802.11 b/g/n)
RTK Module	Supported

LiDAR	
Relative Accuracy	2cm 3cm
Absolute Accuracy	1cm (no
Point Cloud Thickness	filter)
Working Range	▪ 40 m @ 10% reflectivity, ▪ 70 m @ 80% reflectivity
Scan Mode	Mobile
Scan Speed	200,000 points/s
Laser Class	Class1/905nm
LiDAR Channels	40
LiDAR FOV	360°*-7~+52°

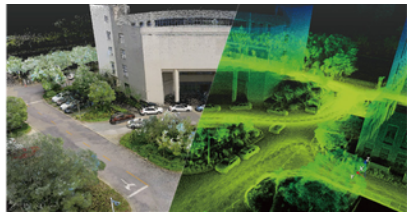
Vision Module	
Camera Resolution	Dual 5MP
Camera Lens	Fisheye
Camera Shutter	Global Shutter

Data and Storage	
Calculating Mode	Real-time calculating/Mixed calculating
Mobile Software	liveScan App for Android/iOS
Calculating Software	PrecisionHub post-processing software for Windows
Point Cloud Format	LAS, LAZ
Color Point Cloud	Supported
Storage	512GB

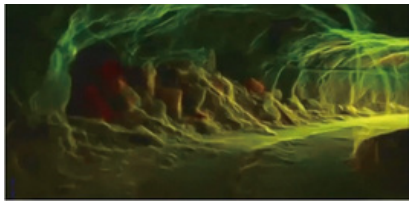


Garage

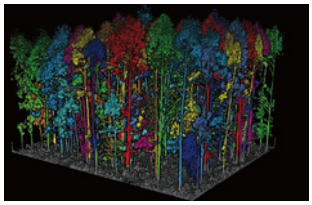
Garden



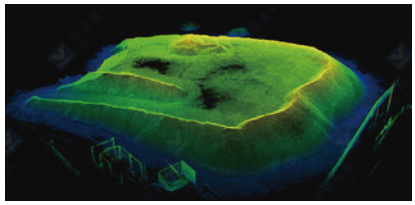
Architecture



Mine tunnel



Forestry



Volume calcuation

Note:The sample point cloud data displayed in datasheet are acquired by eHLS2 Standard version with 32 LiDAR channels.

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eRTK10 mini

POCKET-SIZE GNSS RECEIVER

The eSurvey eRTK10 mini is a pocket-size IMU-based GNSS receiver equipped with a high-performance and high-precision GNSS module. It integrates IMU tilt technology for efficient staking out, features a compact and lightweight design for easy portability, and serves as an ideal high-precision GNSS positioning sensor for seamless integration into various industry application solutions.

GNSS Receiver

Easy to be Integrated

With its configuration of voice prompts, indicator lights, a universal Type-C interface, and Bluetooth 5.0 EDR & BLE for seamless interaction and integration, this device provides stable high-precision GNSS positioning data. It is suitable for various industry solutions requiring high-precision GNSS positioning.

Max 60° Tilt Survey: A Different Way of Working

- Quickly measure accurate points while standing or walking without leveling the pole.
- Concentrate on where the pole tip needs to go, which is especially useful during a stakeout.
- Easily start a survey in environments that are hard to reach, such as building corners and slopes.
- No longer worry about the movement of the pole when measuring, provided that the pole tip is stationary.

Ultra-portable

Palm-sized and weighing just 380g, this receiver is incredibly light and easy to carry. Its sleek design allows seamless integration into portable solutions, delivering stable high-precision GNSS data for a variety of industries.

AR Visual Stakeout: More Efficient Stakeout

There is no need to move the pole back and forth and rely on work experience during a stakeout. Follow the visual guide to precisely find the target stakeout point. Suitable for a non-experienced user and provide up to 50% more efficiency.

Website & Social media

Product Specification

eRTK10 mini

POCKET-SIZE GNSS RECEIVER

GNSS Performance

Satellites tracking	GPS BDS	L1 C/A, L1C, L2P(Y), L2C, L5 B1I, B2I, B3I,
	GLONASS	B1C, B2a, B2b
	Galileo	L1, L2, L3
	QZSS	E1, E5a, E5b, E6
	NavIC	L1, L2, L5
	SBAS	L5
	L-Band	WAAS, GAGAN, MSAS, EGNOS, SDCM, BDS B2b PPP (Only for the Asian-Pacific region), HAS[1]
Channels		1408
Signal reacquisition		< 1 second
Cold start		< 30 seconds
Warm start		< 20 seconds
Hot start		< 5 seconds
RTK signal initialization		< 5 seconds
Initialization reliability		> 99.9%
Update rate		20Hz
High precision static		▪ H: 2.5 mm + 0.1 ppm (RMS) ▪ V: 3.5 mm + 0.4 ppm (RMS)
Static and fast static		▪ H: 2.5 mm + 0.5 ppm (RMS) ▪ V: 5 mm + 0.5 ppm (RMS)
RTK		▪ H: 8 mm + 1 ppm (RMS) ▪ V: 15 mm + 1 ppm (RMS)
Standard point positioning		▪ H: 1.5 m (RMS) ▪ V: 2.5 m (RMS)
Code differential		▪ H: 0.4 m (RMS) ▪ V: 0.8 m (RMS)
SBAS		▪ H: 0.3 m (RMS) ▪ V: 0.6 m (RMS)
Correction data		RTCM V3.X, RTCM2.X, CMR
Data output		GGA, ZDA, GSA, GSV, GST, VTG, RMC, GLL, Binary

Power Supply

Battery	Rechargeable Built-in Lithium-ion battery x 1 3.65 V ~ 5800 mAh
Voltage	Type-C PD 12V/1.5A
Working time	Up to 12 hours as rover
Charging time	Typically 1.5 hours

System

Operation system	Linux 8 GB BT5.0+EDR, BLE
Internal memory	802.11 a/b/g/n/ac
Bluetooth	Charge and data transmission
Wi-Fi	View status, update firmware, set up working mode, download data, etc.
Type-C port	Broadcast working mode and status
Web UI	MEMS
Intelligent voice	Fast initialization, dynamic tilt survey up to 60°
Tilt sensor	

Physical

Dimension	Φ98 mm x H45.5 mm
Weight	380 g
Operating temperature	-30℃ ≈ +80℃
Storage temperature	-40
Water / dust proof	IP67
Shock	▪ Withstand topple over from a 2 m survey pole onto hard surfaces
Vibration	▪ Survive a 1.2 m free drop
Humidity	Vibration resistant
Indicators	Up to 100%
Button	Satellites, datalink
Certificate	Power button, short press to voice broadcast working mode and status
	CE, FCC, NGS, IGS

Visual Configuration

Visual stakeout	
Pixel	2 MP
Frame Rate	25 FPS
FOV	88°

1: It will be supported through future firmware update.

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