## ■ POST PROCESSING SOFTWARE

The post processing software is a Windows based software designed and developed for LS-series handheld 3D laser scanners, it is also compatible with third-party device for point cloud processing.
The software is a powerful point cloud post-processing software that is supported by the system. The software has rich functions and is easy to operate. It supports loading and exporting point clouds in various formats. It can achieve a series of functions such as one-click point cloud denoising, point cloud splicing, shadow rendering, coordinate transformation, automatic horizontal plane fitting, automatic point cloud data report generation, forward photography and point cloud encapsulation.
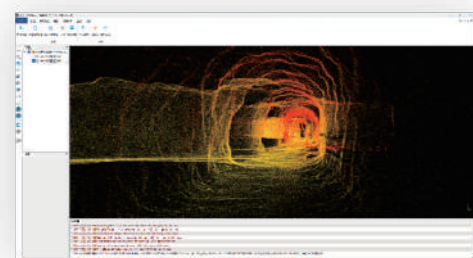
Windows Software

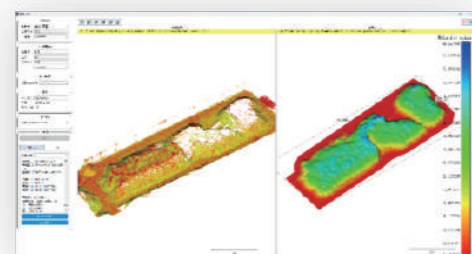### ADVANTAGES
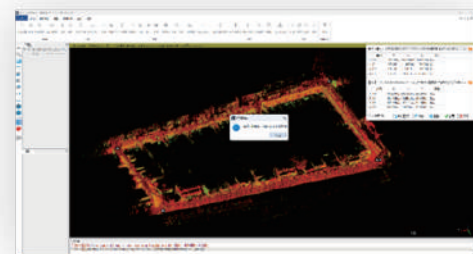
**Control Point Conversion**
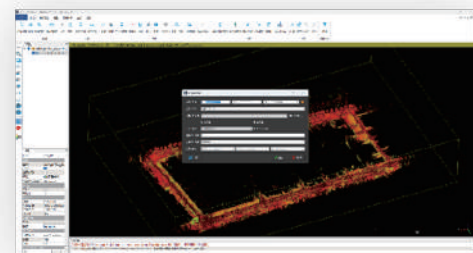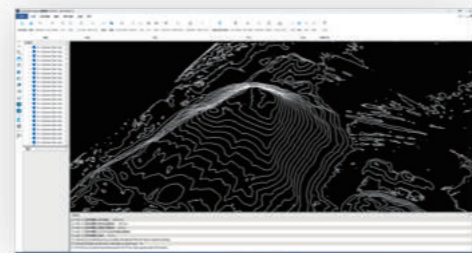
**Multi Coordinate  System Conversion**

**X-Ray Display Mode**

### PARTIAL FUNCTION DISPLAY
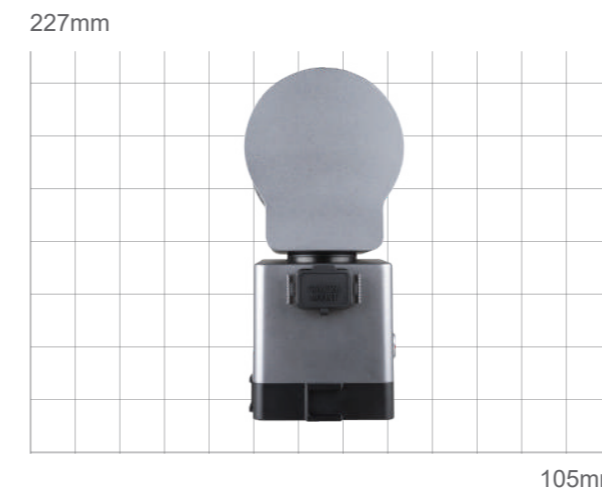
**Measurement of Pile Volume**

**Creating Contours**
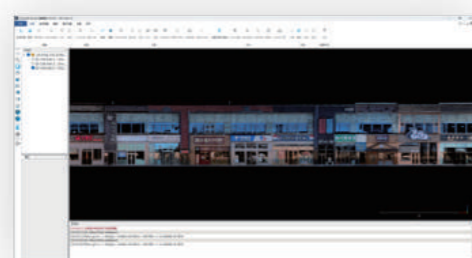
**Color Point Cloud**

## ■ SPECIFICATIONS

117mm
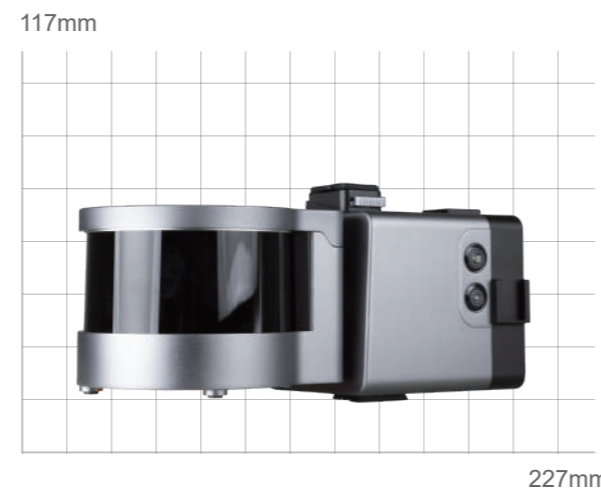
227mm

227mm

105mm

Weight: 1.35 kg
Size(L x W x H): 227mm x 105mm x 117mm

| Physical | |
|---|---|
| Weight | 1.35 kg (handhold parts) |
| Working Temperature | -35°C~+60°C |
| Storage Temperature | -40°C~+85°C |
| SSD | 500GB (expandable) |
| IP Code | IP54 waterproof and dustproof |

| Performance | |
|---|---|
| Relative Accuracy | 1cm (peak) |
| Scanning Range | 120 meters |
| FOV(Field of Scan) | 360°x 285° |
| Scanning Speed | 320,000 Points per second |
| Scan positioning | SLAM (No need for GPS) |
| Solution method | Hybrid algorithm |
| Live preview | Mobile APP |

| Laser | |
|---|---|
| No. of Laser Sensor | 1 |
| Safety Level | Class I |
| Laser Lines | 16-line |

| Battery | |
|---|---|
| Type | Lithium ion battery (hot swap) |
| Capacity | 98Wh/6.8Ah |
| Voltage | 14.4V |
| Battery Time | 4 hours |
| Charging Temperature | 0°C~+40°C |
| Operating Temperature | -20°C~+50°C |

**SinoGNSS**®
By ComNav Technology Ltd.

# LS300
# Laser Scanner

High Precision Positioning Empowers A Digital Era

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# NEW WAY OF MOBILE MEASUREMENT

Capable of multiple scanning modes, the LS300 Laser Scanning System is also suitable for a wide variety of applications. The GNSS module can be switched quickly, enabling scanning of the WGS84 coordinate systems point clouds, with absolute accuracy of about 2 cm with mapping software.

## HANDHELD RTK KIT

| Size | 33x26x16cm |
|---|---|
| Material | Aviation Aluminum、ABS |
| Weight | 167g |
| Install Time | <30s |
| Positioning Accuracy | Horizontal Around 1cm Altitude Around 2cm |

## BACKPACK KIT

| Size | 33x26x16cm |
|---|---|
| Material | Aviation Aluminum、ABS |
| Weight | 2.21kg |
| Install Time | <1min |

## CAR MOUNT KIT

| Size | 34x25x16cm |
|---|---|
| Material | Aviation Aluminum、ABS |
| Weight | 1.9kg |
| Install Time | <3min |

## DRONE KIT

| Size1 | Host CPU18.4x13.4x4.8cm |
|---|---|
| Size2 | Scanner 13.5x12.5x10.2cm |
| Material | Aviation Aluminum、ABS |
| Weight | 270g |
| Install Time | <3min |
| Supporting Series | Dji M300 |

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# INTRODUCTION

The LS300 Laser Scanning System uses SLAM technology (simultaneous localization and mapping), which is real-time positioning and mapping technology. It does not rely on GNSS positioning, and performs self positioning and incremental 3D mapping in unknown environments, including indoors and outdoors. Its lightweight design makes measurement work so easy. With synchronous data acquisition, simply walking around can complete the information data collection. ComNav Technology is committed to providing user-centered 3D laser mobile scanning measurement system product solutions, bringing users a better work experience.

Handheld Terminal

Interface

Target Stand

Excellent Performance    Color Screen    Diverse System Platform    Hot Swappable Batteries    HSL Hybrid Solution    APP Real Time Preview    Anchor Point Process

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# FEATURES

**Excellent Performance**

LS300 configures a rotating laser sensor probe with 120 meters working distance; sample rate up to 0.32M points per second; Large field of scan up to 360°×285°; Point accuracy up to 1.0cm. (low reflectivity extended-range mode)

**HSL Hybrid Solution**

The LS300 has a unique hybrid solving technology which can perform post processing for the previous data during the scanning. High precision data collected is more faster and efficiency ever before.

**Color Screen**

A new color status display screen with a larger size supports more information display as well as operating instructions which making it easier to use and getting started.

**APP Real Time Preview**

During operation, APP can browse point cloud data in real time which support multiple browsing interaction modes and more humn-computer interaction content.

**Diverse System Platform**

Multiplicity external ports can easily interface with third-party device systems, providing diverse way of collaborative work, bringing more possibilities for expanding application scenarios and methods.

**New Visual Experience**

The LS300 has more excellent point cloud color function which provides users with clear immersive color effects, clearer details, more bright colors and more realistic effects.

**Hot Swappable Batteries**

The LS300 adopts two batteries uninterruptible redundancy design, supports hot swapping and replacement of batteries, and has this technical patent.

**Anchor Point Process**

An anchor point solution function ensures accuracy and stability when scanning data indoors and outdoors with large ranges, low characteristics, and high difficulty. During the data post process, input the absolute coordinates of control points, and control points can perform overall data adjustment on the data to obtain high-precision scanning results data.

# APPLICATION

Smart City

Digitization of Underground Facilities

Agriculture, Forestry, Geology

Surveying and Mapping