

# Cygnus Lite

Lightweight Handheld SLAM Scanner



Made by Sweden

# Cygnus Lite

## Handheld SLAM Scanner

The lightweight Cygnus Lite handheld LiDAR scanner redefines data collection with its 20° tilt mechanism, dual wide-angle cameras, and an integrated RTK module. It captures unprecedented detail and vibrant color in every scan, ensuring your data is comprehensive and exceptionally accurate.



1.0 kg  
Lightweight



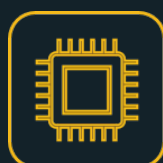
Ultimate  
Efficiency



Realistic  
Colorization



SLAM & RTK  
Superb  
Accuracy



Onboard  
Processing



## Features



### Compact Design, Wider Coverage

The innovative 20° tilt angle lets the laser scanner capture a wider range of scans in its standard handheld configuration, thereby minimizing any potential data missing and gaps.

### Realistic Reconstruction with Cameras

With two 12 MP HD cameras, Cygnus Lite captures clear imagery for point cloud RGB colorization with full field of view coverage, delivering highly realistic and detailed 3D reconstructions.



### Enhanced Accuracy via Built-in RTK

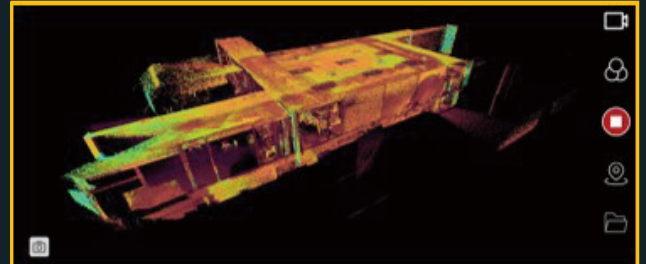
The Cygnus Lite utilizes advanced RTK and SLAM technologies to deliver stable, accurate, and reliable positioning data. It features a high-precision multi-constellation, multi-frequency GNSS module for enhanced performance.



# Software

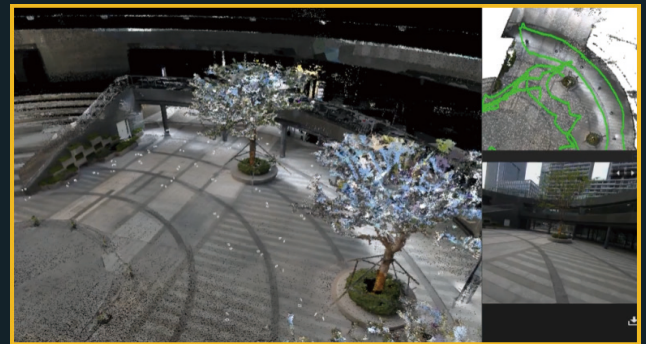
## SatPoint APP

In SatPoint APP on mobile, the ultimate simple plug-and-play operation allows anyone to become a 3D scanning expert in minutes. Real-time color point cloud gives you the assurance that everything you want will be seen and precisely captured.



## SatPoint PC

After scanning, SatLab SatPoint PC software can be used to generate and export point cloud data of flawless quality. Data can be measured more intuitively through the combination of image and point cloud overlay.



# Inside the Box

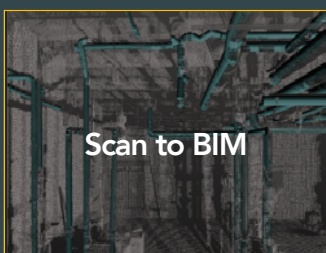
- Cygnus Lite Mainframe
- 2 Handle Batteries
- GCP Benchmark
- Type-C Cable
- Type-C Charger
- TF Card 256GB
- Polishing Cloth
- MagSafe Ring
- SatPoint PC USB Dongle



# Scenarios



Volume Measurement



Scan to BIM



Indoor Mapping



3D Reconstruction

# Technical Specifications

## System

RTK Performance 0.8 cm + 1 ppm (H)  
1.5 cm + 1 ppm (V)

Processing Real-time processing  
Post processing

Range Noise  $\pm 1$  cm

Accuracy Indoor  $\pm 2.5$  cm

Precision Indoor  $\pm 1$  cm

## Operation

SatLab SatPoint APP for Android OS including live 3D in colorized mode, intensity mode and elevation mode while scanning, device control, device status and data management.

Android 12 or higher recommended devices: Samsung Galaxy S22, S23, S24.

Support MagSafe stand for mobile devices.

## Environment

Robustness Designed for indoor and outdoor use

Temperature Operating:  $-20 \sim +55^{\circ}\text{C}$   
Storage:  $-20 \sim +60^{\circ}\text{C}$

IP Rating IP54

## LiDAR & Imaging

Camera 12 MP \* 2

Camera FOV  $360^{\circ} * 270^{\circ}$

Laser Class 1

LiDAR FOV  $360^{\circ} * 59^{\circ}$

Point Measurement Rate 200,000 pts/sec

Frequency 10 hz

Range 0.1 ~ 40 m @ 10%  
0.1 ~ 70 m @ 80%

## Physical & Electrical

Weight 1.0 kg (With battery)

Size (mm) 297 \* 103 \* 104 (With battery)  
133 \* 104 \* 103 (Mainframe)

Battery 3150 mAh \* 2 (Max. 90 mins battery life for each)

Input 14.4 v

Charging Type-C, PD-30 W (Average 1.5 hr charging time )

## Data Transfer

Format .las, .pcd, .ply

Detachable Storage TF Card, 256GB, max 512GB extendable

Data Transfer Wireless and USB 3.0

Desktop Software SatLab SatPoint PC



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