SATLAB®
GEOSOLUTIONS

Cygnus

The Handheld SLAM Scanner

Made by Sweden

Speedy and Accurate

With a scanning range of up to 120m, 320,000 points per second. a large 360°x 285°field of view, and powerful low-reflectivity range extension, the Cygnus handheld SLAM scanner can scan simple or complex environments accurately and completely in less time.

Real-time and Rapid Data Processing

The SLAM processing can be done in a second during its scanning process thanks to the unique real-time decoding algorithm. And the data can be exported immediately when the scan is complete, enhancing working efficiency greatly.

Powerful Mobile Software

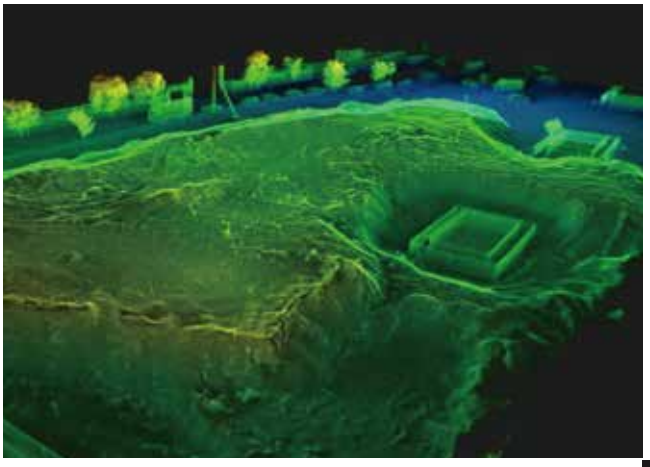
The SLAM Manager APP is compatible with mobile devices, enabling real-time point cloud viewing and providing a range of powerful interactive features.

Light-weight, Durable and Versatile

The durable design and rugged structure make the scanner a perfect tool to work effectively in any harsh environment from -30°C to 60°C.
Its compact size and lightweight also make it flexible to use as hand-held or pair with backpack, drone and vehicle, meeting the requirements of various operational scenarios.

Range	120 m	**Carrier**	Handheld / Backpack / UAV
Laser Class	Class 1, Eye Safe	**Scanner Weight**	1.5 kg, 227×98×98 mm
FOV	360 × 285°	**Data Logger Weight**	0.8 kg, 158×70x145 mm
Accuracy	0.5-2 cm	**Channels**	16
Points/s	320,000	**Battery Life**	4 hrs
Processing	Real-time processing	**Ingress Protection**	IP54
Display	Real-time preview using mobile terminal	**Internal Storage**	512 GB Extendable to 1TB by TF card

Applications

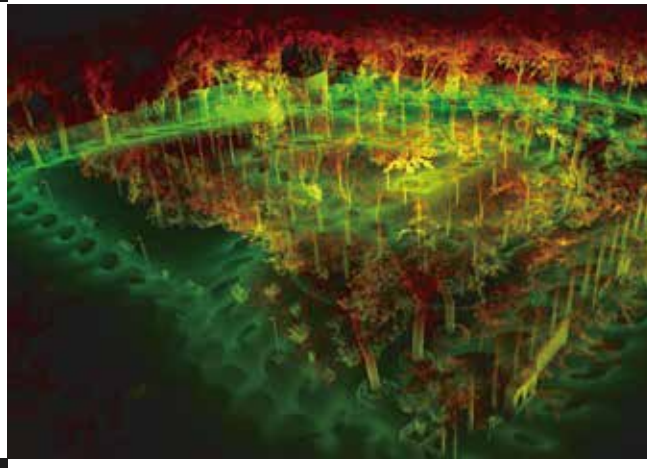


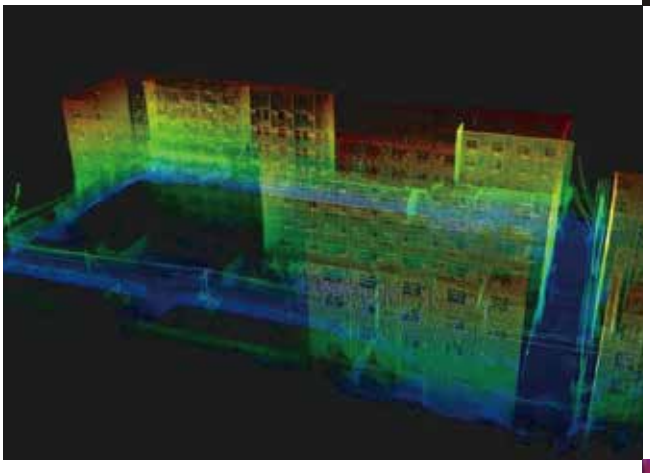
Stockpile Volumes Measurement

Cygnus is ideal for inventorying coal piles, mine piles, materials and grain silos. Based on its laser scanning and SLAM positioning technology, it can be used for fast mobile scanning operations in sheds and outdoor environments. And its unique ultra-low reflectivity range extender function is particularly effective for coal piles and ore materials volume measurement, offering unparalleled advantages over other measurement methods.

Natural Resources & Environment Investigation

The complex environments and high-density coverage of agriculture, forestry and geology make 3D data acquisition a problem. But Cygnus, with its large field of view, can acquire a large degree of horizontal and vertical surface information of the tree canopy, making agricultural growth, forestry and geological measurements simple and flexible.



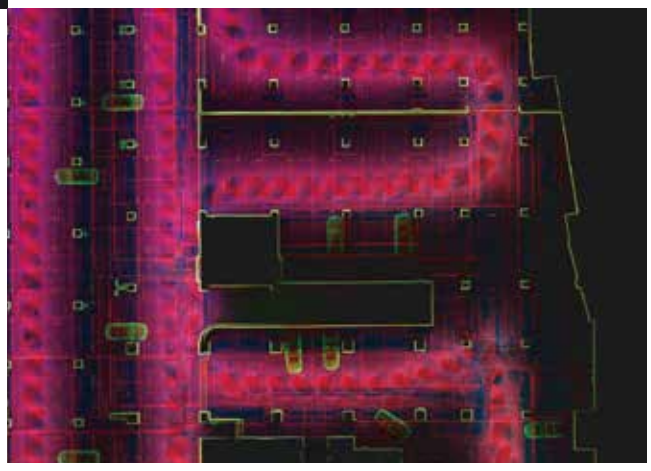


Building Information Collection

Pair with a variety of mounting options perfectly. Capturing high-density spatial information from all kinds of building information collecting activities quickly, such as cadastral surveys and building facade collection.

Underground Space Digitalization

The SLAM positioning technology realizes a fast, complete and accurate spatial point cloud data collection for both indoors and outdoors, such as underground parks, metro stations, shopping malls, airports, factories, and mines.



Package Components	Model/Type	Nos.
Mainframe	Cygnus	1
Data-logger	Supports 2 batteries and hot-swap	1
Handle	12 cm	1
Shoulder strap	80-160 cm	1
Main cable	111 cm	1
Memory Card	128 GB	1
Battery	14.4v, 6800mAh	2
Battery Charger	14-16.8 V	1
Host Machine Charger	19 V	1
Memory Card Storage Box	Supports 8 x SD cards & 16 TF cards	1
USB Flash Disk	64 GB	1
Mobile Phone Support	Max 9.3 cm	1
LED Flashlight	Max 800 lm	1
Charge Cable for LED Light	30.5 cm	1
Safe Transporting Box	40 * 30 * 15 cm	1

Optional Accessories	Picture	Features
UAV Platform Adaptor		Perfectly support the UAV platform for more efficiency data collection
RTK Backpack		Backpack with GNSS RTK system to precise point cloud acquisition
Vehicular Bracket		Convenient combination for any vehicle on any land.
Panoramic Camera		20MP light-weight panoramic camera with HDR for colorize the point cloud world

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