

X70^{GO} Laser Scanner

3D Handheld
Laser Scanner

X[⚡]WHIZZ³⁰⁰³



X70^{GO} The new era of hybrid scanning

X70^{GO} is a real-time 3D model reconstruction device which integrates inertial navigation module, high performance computer and storage system.

It is equipped with a 360° rotating head, which, combined with the SLAM algorithm, generates high-precision point cloud data.

A 12 MP visible-light camera provides texture information, while a visual camera guarantees stronger real time preview with GOapp.

Mapping results are generated immediately inside the scanner, right after scanning: choose if you want to color them and improve their accuracy, postprocessing with GOpost software.



X-WHIZZ MODE

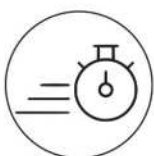
X70^{GO} merges mobile and stationary surveying.

To the advantageous SLAM solution that allows you to survey large areas in a very short time, it combines a stationary mode to scan with higher resolution. Mount X70^{GO} on a monopod and stand still in key areas for a few seconds. It is the perfect trade-off for those who need speed and detail in a mobile survey.



REAL TIME RESULTS

The built-in visual camera makes the real time SLAM algorithm more stable, especially in weak structural textures environments. The data are ready to be used as soon as the survey is completed.



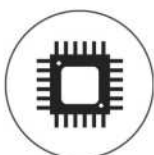
RAPIDITY AND REDUCED WORKLOAD

No more multiple scan station, just move around the scene to collect the entire 3D point cloud, without time-consuming cloud to cloud alignment.



AUTOMATIC CONTROL POINT MEASUREMENT

When capturing data, X70^{GO} is able to collect reference points too. They can be matched with known control points to georeference the scans.



HIGH PERFORMANCE COMPUTATION

The system can directly output the mapping results after the acquisition is completed.

You can choose to post-process the data, in case you desire to improve its accuracy.

X⁺WHIZZ TOOL





SLAM TECHNOLOGY

Simultaneous Localization And Mapping

STONEX SLAM technology delivers more range, more points per second and best in class on board processing algorithms to reach unmatched speed of capture and reliability even in the more demanding environments.

BUNDLED SOFTWARE



GOapp

GOapp is a dedicated mobile application for X70^{GO}, to manage projects, real time point cloud display, image preview, firmware upgrade and other operations. The APP runs on Android operating system.



GOpost

Windows post processing software which performs optimization processing, colouring of point clouds, filtering and noise removal. You can also import control points to georeference the point cloud.



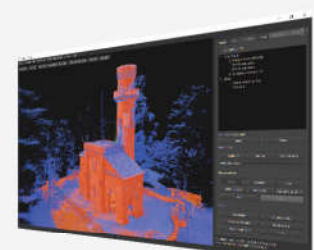
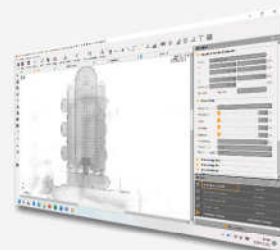
3D SOFTWARE



Cube-3d is a Photogrammetric software for mapping and aerial image processing, dedicated to land surveying specialists. It will transform image data into highly accurate digital maps and 3D models with extreme precision. It imports Cube-a surveys and is fully compatible with registered Stonex scans and with any third-party 3D models.



Thanks to the collaboration between Stonex and PointCab, you can manage your point clouds with it. PointCab Origins is your Swiss army knife when it comes to the evaluation of point cloud data – working with all laser scanners and compatible with all CAD and BIM systems.



X70^{GO} TECHNICAL FEATURES

LIDAR

Max Range	70 m @80%
Min Range	0.1 m
Scanning Point Frequency	200.000 pts/s
Field of view	360°H, -7~52°V
Laser Class	Class 1
Wavelength	905nm
Frame rate	10 Hz

COLOR CAMERA

N° of pixels	12 Mpx
Diagonal FOV	210°
Focal length	1.26 mm
Resolution	4000x3000 px
Sensor size	1 inch
Pixel size	1.55 μ m

VISUAL CAMERA

N° of pixels	12 Mpx
Diagonal FOV	100°
Focal length	3.24 mm
Resolution	4000x3000 px
Sensor size	1 inch
Pixel size	1.55 μ m

1. Environment dependent
2. Any CPU, any NVIDIA GPU

SYSTEM

Relative accuracy	6 mm ¹
Control point support	Ground & wall
Data storage	512GB SSD
Communication	Wi-fi, USB type-c, LEMO
Operating mode	SLAM mode Static mode (X-Whizz)
Processing mode	Real time processing Post-processing with <i>GOpost</i> ²

ELECTRICAL SPECIFICATION

Power consumption	20W
System supply voltage	20V
Operating time	1.5 h (single battery)
Battery input voltage	5-20V
Battery output voltage	10.8V
Battery capacity	3000mAh

PHYSICAL SPECIFICATION

Weight	925 g (Without battery) 1450 g (With battery)
Size	364.5 mm x 173.8 mm x 170 mm
Operating temperature	-20°C to +50°C (-4°F to 122°F)
Storage temperature	-40°C to +70°C (-40°F to 158°F)
Operating humidity	<95%
Waterproof/Dustproof	IP54

ACCESSORIES

RTK MODULE

Add RTK module to set your point cloud in a global coordinate system. It can also help the system, adding GNSS info to LIDAR and IMU in the SLAM algorithm. If the GPS does not have a satellite connection, such as indoors, the system will rely on LIDAR and IMU to locate itself.

RECEIVER

	GPS L1, L2
Satellite Signals Tracked	GLONASS L1, L2 GALILEO E1, E5b BDS B1, B2
Single Point Positioning (RMS)	Horizontal: 1.5 m Vertical: 3.0 m
DGPS (RMS)	Horizontal: 0.4 m Vertical: 0.8 m
RTK (RMS)	Horizontal: 1 cm + 1 ppm Vertical: 1.5 cm + 1 ppm
Data Update Rate	20Hz
Time Accuracy	20ns
Speed Accuracy (RMS)	0.03 m/s



TELESCOPIC POLE

Hold the X70^{GO} on the monopod for a stationary survey in key areas with the X-Whizz mode.

The quick-lock swivel system makes the pole quick and easy to extend to different heights, up to a maximum of 1,60 meters. Its handle ensures a firm, ergonomic grip during use: maximum efficiency and comfort are guaranteed.



Illustrations, descriptions and technical specifications are not binding and may change

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