

SLAM X40^{GO}



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3D Product Manager

X40^{GO} - Product description

LiDAR

70-meter range | 200k pts/s

RGB camera

12 Mpx | 210° Diagonal FOV

Magnetic connection

Lock your phone quick and easily

SSD storage

512GB built-in SSD storage disk

LED bar

Know the status of the device

Dismountable Handle

Replaceable lithium battery handle

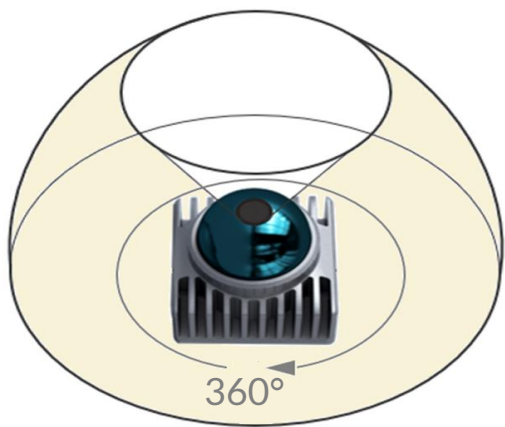
GCP base

Collect ground control point while scanning

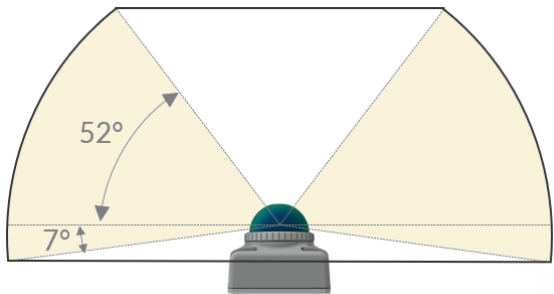


X40^{GO} – Technical specifications

LiDAR	
Min range	0.1 m
Max range	70 m @80% 40 m @10%
Scanning point frequency	200.000 pts/s
Field of view	360° H, -7~52° V
Laser class	1



LiDAR
Horizontal FOV



LiDAR
Vertical FOV



X40^{GO} – Technical specifications

RGB Camera	
Pixels	12 Mpx
Diagonal FOV	210°
Focal Length	1.26mm
Resolution	2704x2288

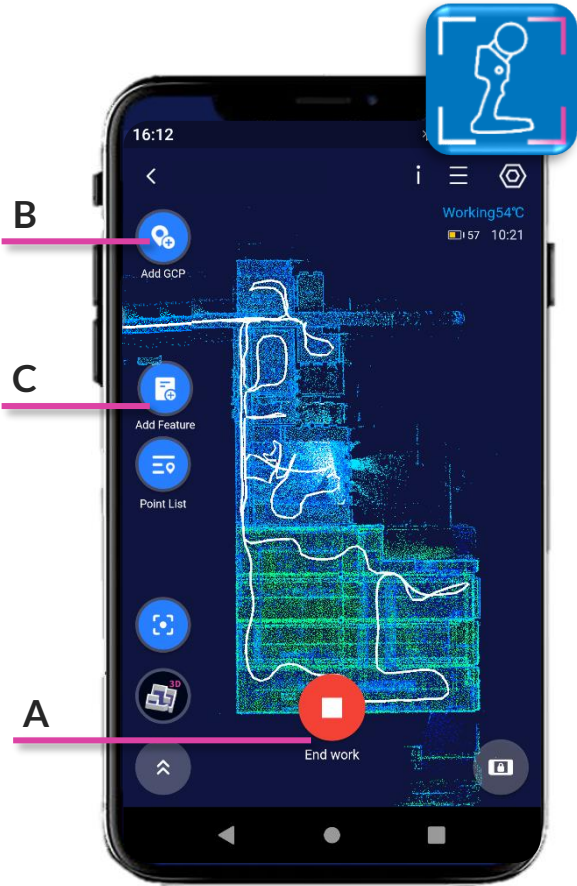
System	
Relative accuracy	6mm *
Communication	Wi-fi, USB type-c
Data storage	512GB SSD
Operating time	1.7h (single battery)
Weight	650g (without battery) 1160g (with battery)
Dimention	283.8 x 173.8 x 170 mm
Operating temperature	-20° C to +50° C (-4° F to 122° F)
Waterproof/Dustproof	IP54

*Environment dependent



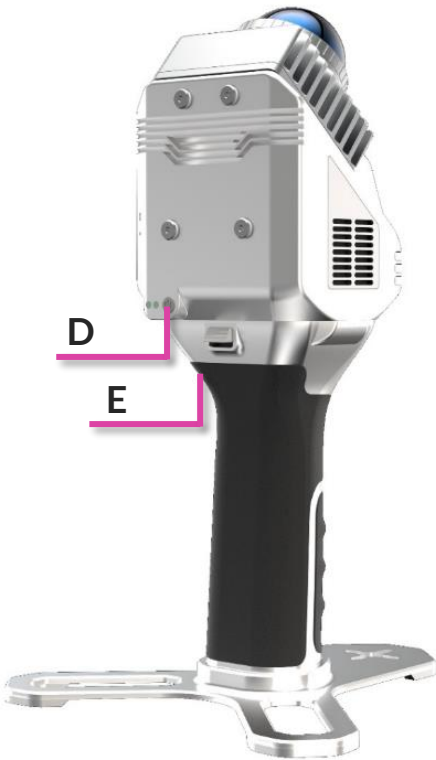
X40^{GO} – Data capturing

With Goapp

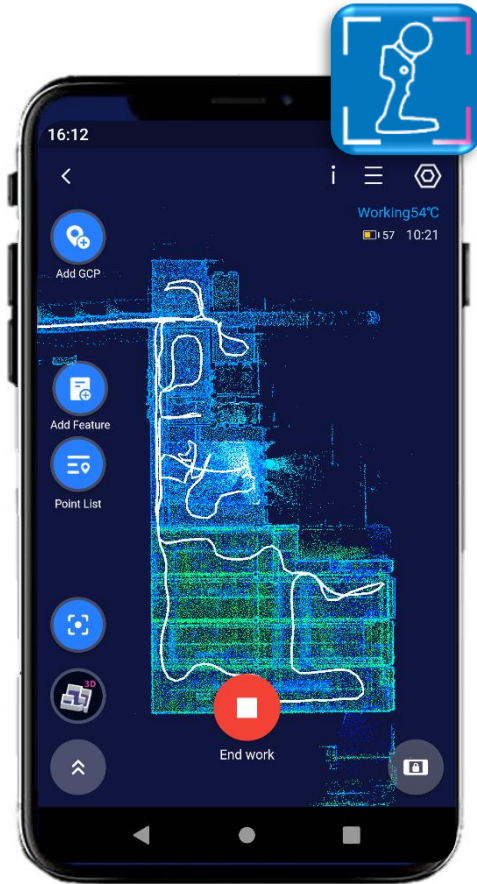


	GOapp	Device only
Start/stop scan	A	D
GCP collection	B + 10sec	E + 10sec
Geotag	C	-

Without GOapp



X40^{GO} – Data capturing



With Goapp

Use **GOapp** to see the point cloud in real time, update firmware and manage projects.

The APP runs on Android and iOS devices.



X40^{GO} – Software

GOpst

Windows post processing software which performs:

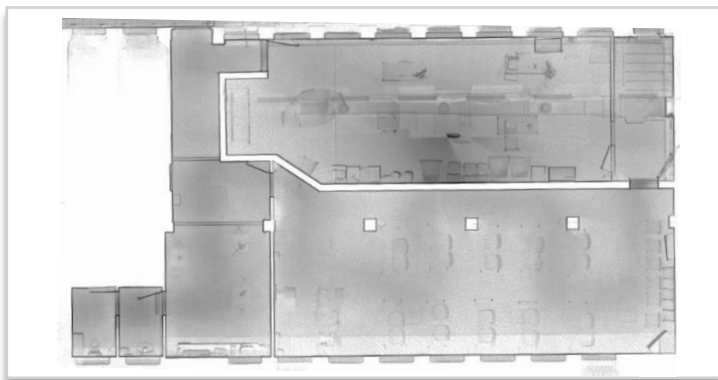
- *Optimization processing*
- *Coloring of point clouds*
- *Rototranslation / elastic compensation on GCP*
- *Accuracy report with check points*
- *Panorama generation **
- *Geotag extraction*

** with pano camera extension*

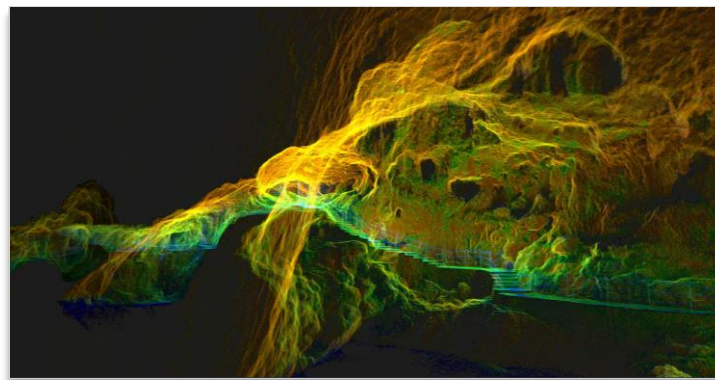


X40^{GO} – Applications

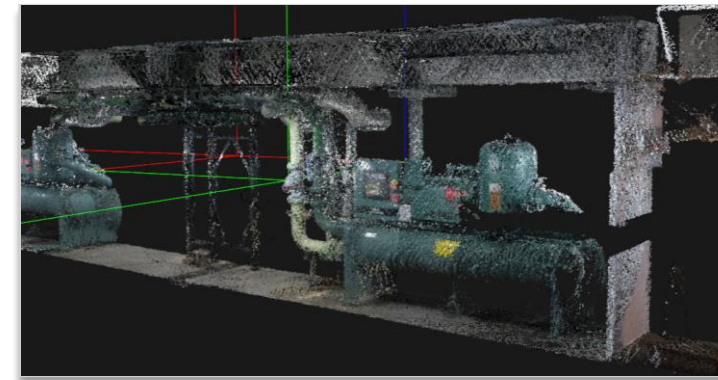
REAL ESTATE



MINING



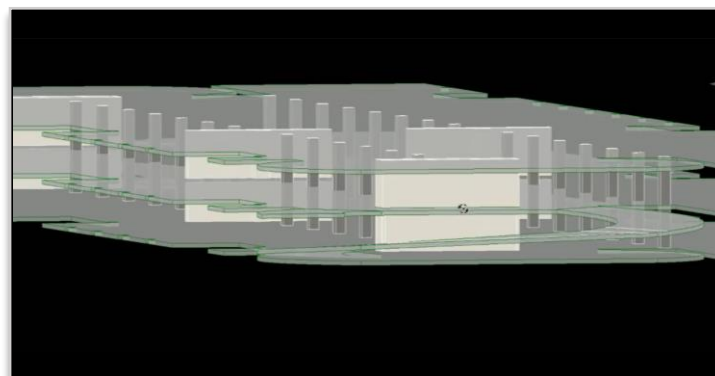
INDUSTRIAL



ARCHITECTURE & CULTURAL HERITAGE



BIM MODELLING



FACILITY MANAGEMENT



Marketing

X40^{GO} – Pictures & Logo



SLAM X40^{GO}
HANDHELD 3D SCANNER

X40^{GO} - Datasheet



X40^{GO} Laser Scanner



3D Handheld
Laser Scanner

STONEX
SLAM

X40^{GO} TECHNICAL FEATURES

X40^{GO} SLAM Laser Scanner

X40^{GO} is a compact system providing high-precision point cloud data, based on SLAM technology. The 70-meters range LiDAR orientation has been designed to maximise coverage and a 12-megapixel camera provides texture information to the 3D model.

An affordable and simple solution, the idea for interior surveys and layout generation.

LIDAR

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

RGB CAMERA

N° of pixels	12 Mpx
Diagonal FOV	210°
Focal length	1.26 mm
Resolution	2704X2288 px
Sensor size	1/2.3 inch
Pixel size	1.55 µm

SYSTEM

Relative accuracy	6 mm ¹
Control point support	Ground & wall
Data storage	512GB SSD
Communication	Wi-Fi, USB type-c
Operating mode	SLAM mode, Real-time visualisation
Processing mode	Post-processing with GOpost ²

ELECTRICAL SPECIFICATION

Power consumption	18W
System supply voltage	20V
Operating time	1.7 h (single battery)
External power	USB Type-c
Battery capacity	3000mAh

PHYSICAL SPECIFICATION

Weight	0.65 g (Without battery)
	1.16 kg (With battery)
Size	283.8 mm x 173.8 mm x 170 mm
Operating temperature	-20°C to +50°C (-4°F to 122°F)
Operating humidity	<95%
Waterproof/Dustproof	IP54

1 Environment dependent

2 Any CPU, only NVIDIA GPU

BUNDLED SOFTWARE

GOapp



GOapp is dedicate mobile application for Stonex SLAM scanners, to manage projects, real time point cloud display, image preview, firmware upgrade and other operations. The APP runs on Android and iOS operating system.

GOpost



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



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

STONEX AUTHORIZED DEALER

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ML1.1 - REV 02 - 14020 - OCTOBER 2024 - VER.01

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STONEX

SLAM - Catalogue



SLAM LASER SCANNERS 3D HANDHELD

www.stonex.it

- 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.
- REAL TIME PREVIEW**
See your scanning progress in real time using the dedicated Android App directly in the field. X200^{3D} also provides a real-time view of the coloured cloud.
- AUTOMATIC CONTROL POINT MEASUREMENT**
When capturing data, the device is able to collect reference points too. They can be matched with known control points to georeference or compensate the scans, or to check the final quality of your survey.
- STRONG ALGORITHM, RELIABLE DELIVERABLE**
Data processing can be done in a few clicks, obtaining the best result for the situation, even processing batches of scans. In the case of special environments, the processing parameters can be edited to maximise the quality.

Stonex offers a wide range of SLAM products, capable of generating high-precision point cloud data. All the devices are equipped with LiDAR, camera for texture information and inertial navigation module. The integrated structure includes storage system and built-in replaceable batteries. Mapping results are visible in real time from the GOapp. GOpost can perform post-processing of collected data, generate high precision coloured point clouds, produce panoramic images and integrate GNSS data. The uniqueness of Stonex SLAMs is in the stability and strength of the algorithm, which is able to reconstruct complex scenarios that are not trivial for this type of technology.

- GEOTAG COLLECTION**
Directly in the field you have the possibility to take pictures or add notes related to your position. Those information will be available and consultable inside the point cloud.
- WIDE RANGE OF ACCESSORIES**
Stonex SLAMs are equipped with a very interesting range of accessories, which facilitate its use in the field and cover different scenarios. Backpack, shoulder hook or vehicle mount platforms allow to cover long trajectory effortlessly.
- X-WHIZZ MODE X+WHIZZ**
X70^{3D} and X200^{3D} models merge mobile and stationary surveying. To the advantageous SLAM solution that allows you to survey large areas in a very short time, they combine a stationary mode to scan with higher resolution. Mount the device 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.

APPLICATIONS

- BIM & Real estate**
Gather a complete 3D model of civil or industrial structures with a simple walk-through, from which your project deliverables will be effortlessly extracted.
- Facility management**
Document any information, exploiting the panorama images, the X-Whizz mode or the geotag function with pictures of details or



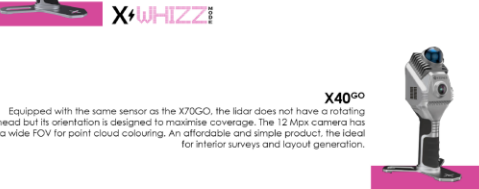
X120^{3D}
The system has a rotating LiDAR head with a 16-channel sensor and a range of 120 metres, with 360°x270° point cloud coverage. Equipped with three 5Mpx cameras to generate a 200° FOV horizontal and 100° FOV vertical, capable of synchronously obtaining texture information and producing colour point clouds and partial panoramic images.



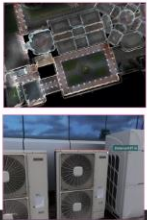
X70^{3D}
It integrates a 360° rotation head with 70-metres range LiDAR, a 12 Mpx visible-light camera which provides texture information, and a visual camera that guarantees stronger real-time preview with GOapp. Mapping results are generated immediately inside the scanner, right after scanning; choose if you want to colour them and improve their accuracy, postprocessing with GOpost software.



X200^{3D}
The rotating head has 32-channel sensor with 300 metres range and 3 returns. Embedded GNSS board and two 12 Mpx cameras, which provide texture information and panoramic images. Colour information is available in real-time and mapped results are generated immediately inside the scanner; choose if you want to improve their accuracy postprocessing with GOpost software. The high precision IMU makes the product versatile, even for use on UAV drone.



X40^{3D}
Equipped with the same sensor as the X70GO, the lidar does not have a rotating head but its orientation is designed to maximise coverage. The 12 Mpx camera has a wide FOV for point cloud colouring. An affordable and simple product, the ideal for interior surveys and layout generation.



BUNDLED SOFTWARE

- GOapp**
GOapp is dedicated mobile application for Stonex SLAM scanners, 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 and creation of panoramic images. You can also import control points to georeference the point cloud.



APPLICATIONS

Mapping more points per second and best in class on board processing and reliability even in the more demanding environments.



SOFTWARE

Process your data as you wish. Collect and process your data thanks to Stonex solutions, thanks to the bundled software it is possible to acquire data easily and carry out basic post-processing operations. For those who need to carry out complex operations it is possible to use Cube-3d.

3D SOFTWARE

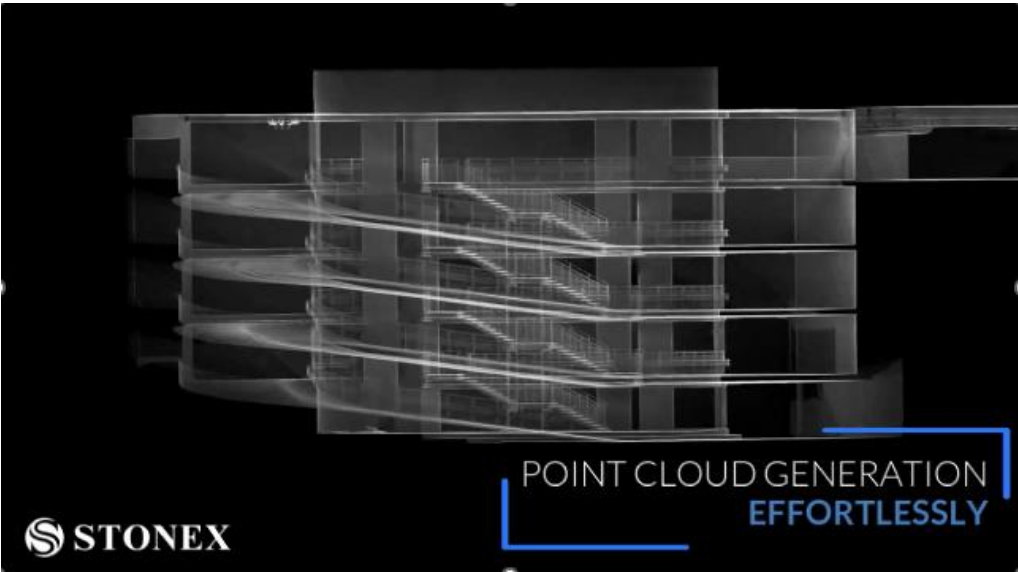
cube-3d
Cube-3d, with the Scanner module, is the perfect solution if you need to register SLAM point clouds together or with any other 3D model. Navigate in the point cloud, create layouts, sections, profiles orthophotos, enjoy the CAD tools or calculate volumes. If, then, you use the UAV drone to complete your survey, the Photo module will transform images into accurate digital maps, all from the same platform.

PointCab

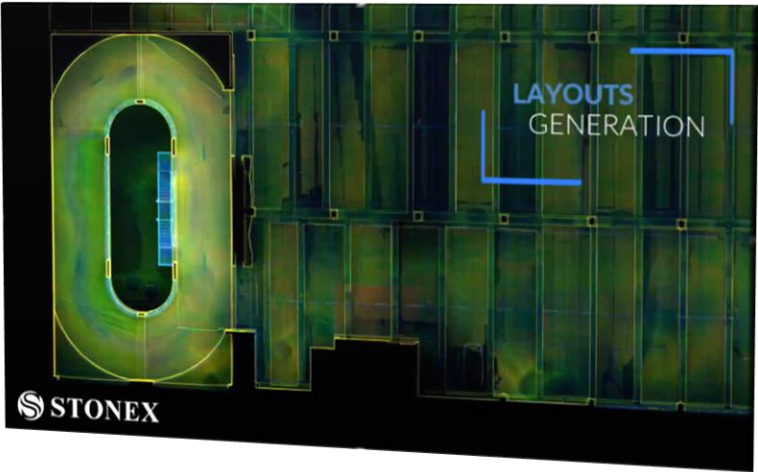
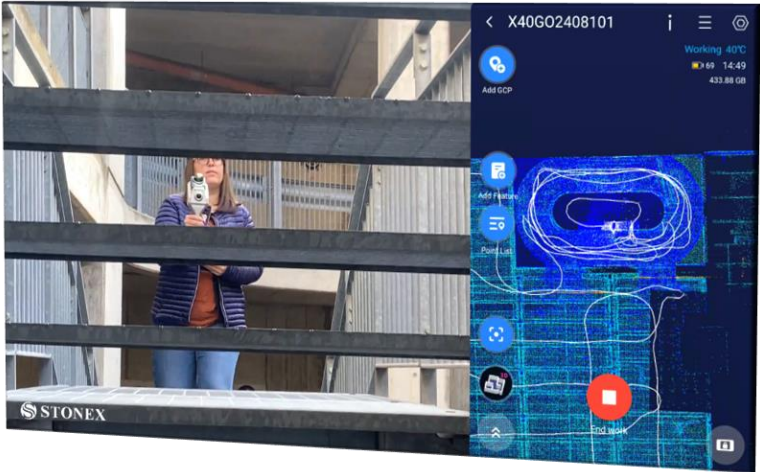
Thanks to the collaboration between Stonex and PointCab, you can manage your point clouds with it. PointCab Origins is your Swiss army knife when it comes to the evaluation of point cloud data - working with all laser scanners and compatible with all CAD and BIM systems.



X40^{GO} - Showcase video



 [X40^{GO} Video](#)



Configuration

X40^{GO} – Stand-alone Configuration

	Product code	Description	Q.ty
	B60-200452	X40GO, SLAM Handheld laser scanner	1
1	30-350780	X40GO, Soft transport case	1
2	30-350736	X70GO/X40GO, battery handle	1
3	30-350737	X70GO/X40GO, GCP base	1
4	30-350740	X70GO/X40GO, charger	1
5	30-350741	X70GO/X40GO, power cable	1
6	40-450926	GOpost, Software desktop license	1



X40^{GO} – Software Bundle Configuration



Product code	Description
B60-200453	X40GO + Cube3D SCANNER



Product code	Description
B60-200454	X40GO + PointCab Origins
B60-200455	X40GO + PointCab Origins 3D
B60-200456	X40GO + PointCab Origins PRO

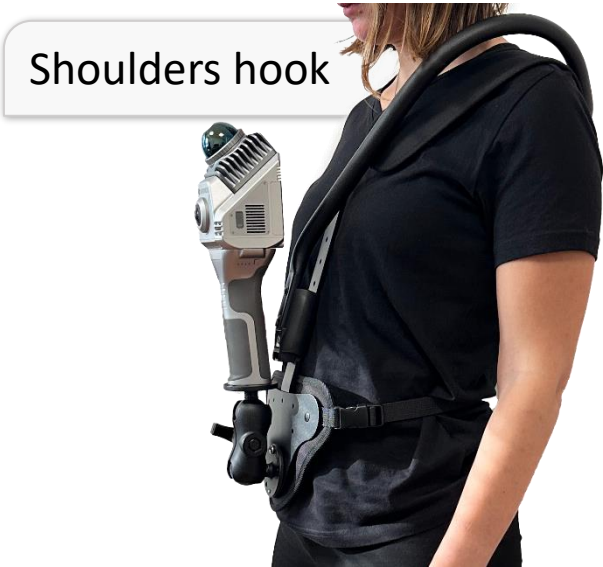
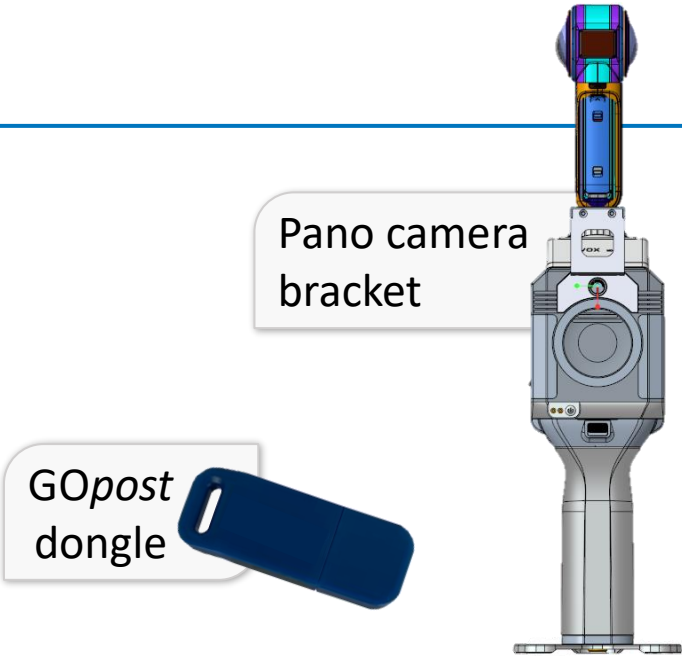


X40^{GO} – Accessories & Services

Product code	Description
30-350777	X40GO, Shoulders hook
30-350779	X40GO, Pano camera bracket (Camera not included) *
30-350657	GOpst, software dongle key

Product code	Description
40-WE2011	X120GO/X70GO/X40GO Warranty Extension 2° Year (Lidar excluded)
40-WE3029	X120GO/X70GO/X40GO Warranty Extension 2° and 3° Years (Lidar excluded)

* Available from December 2024
Camera not included, supported model [Insta X4](#)

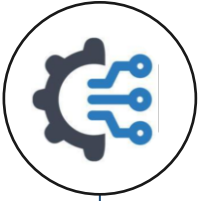


X40^{GO} – Shoulders hook



Market positioning

X40^{GO} – Unique Selling Proposition



STRONG SLAM ALGORITHM

The hardware components for SLAM products are the same throughout the market. The uniqueness of Stonex SLAMs is in the stability and strength of the algorithm, which is able to reconstruct complex scenarios that are not trivial for this type of technology.



COMPACT DEVICE

Just slightly over one kilogram, which will allow you to do surveys without tiring your arm.

The battery embedded in the handle make the hardware compact and free from cables or external data loggers.



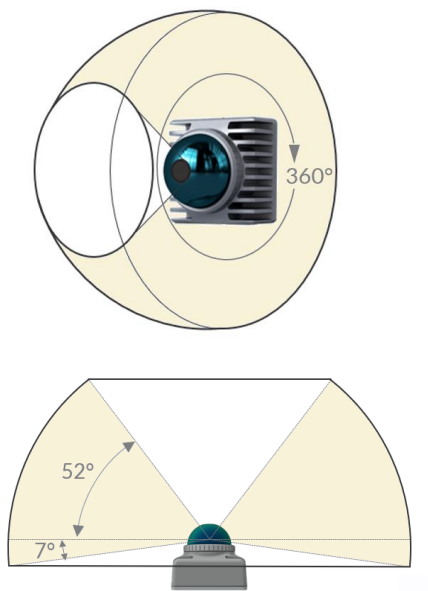
AFFORDABLE

Competitive solution in the market, accessible by a wide range of customers.



Stonex X40^{GO} vs X70^{GO}

Same LiDAR sensor:



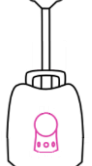
Feature	X40 ^{GO} 	X70 ^{GO} 
Performance	High	
Laser with gimbal	-	✓
Visual camera	-	✓
X ^{WHIZZ} in 3D	-	✓
Accessories / Extensions	Different solutions	

Stonex SLAM - Differences

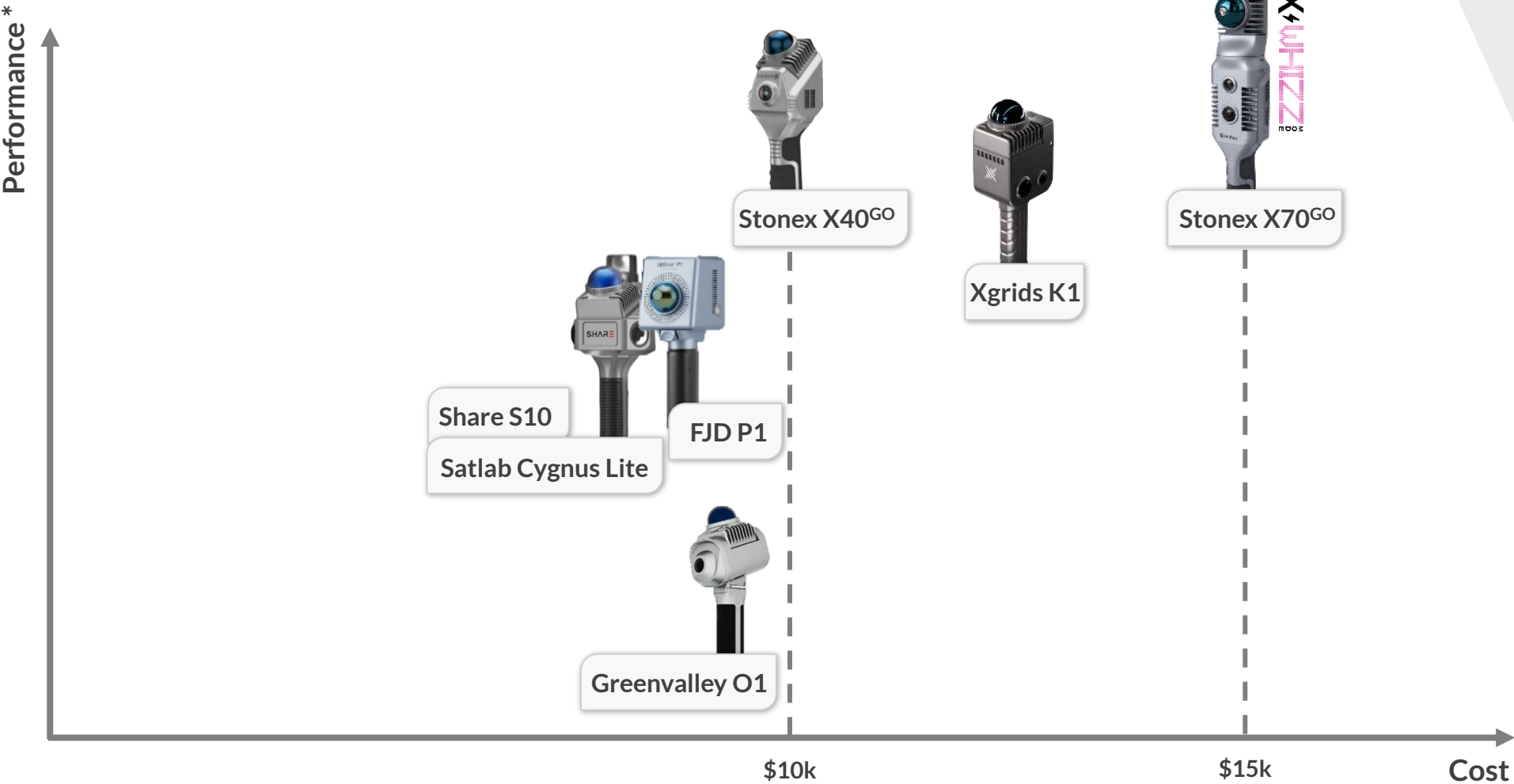
Application		X120 ^{GO}	X40 ^{GO} - X70 ^{GO}
 BIM & Real estate		✓	✓
 Tunnels & Cavities		✓	✓
 Facilities / Industrial		✓	✓
 Powerlines		✓	- *
 Mobile mapping		✓	- *
 Forestry		✓	- *

* Limitations are mainly due to LiDAR range

Stonex SLAM - Differences

	Shoulders hook 	Pano camera 	RTK module 	Backpack 	Vehicle mount 
 X120GO	✓	✓	✓	✓	✓
 X70GO	-	✓	✓	✓	-
 X40GO	✓	✓	-	-	-

X40^{GO} - Competitors



* Considering many aspects related to the resulting point cloud, like accuracy, density, color, ...
It doesn't include product features (e.g. X-whizz).

TIMELINE



Launch
Intergeo 2024

Announcement
November 4°

From now on, orders can be placed

Release
End of november

Delivery of collected orders



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