SLAM X120GO
HANDHELD 3D SCANNER

STONEX

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3D Product Manager

X120^{GO} – Product description

LiDAR
120-meter range | 2 returns | 320k pts/s

RGB cameras
2 units | 12 Mpx each | 360° FOV

Extended interface
External equipment support (e.g. UAV)

LED bar
Keep an eye on the status of your device

GNSS board
Just install the antenna

Rotating head
360° coverage

SSD storage
512GB built-in SSD storage disk

Dismountable Handle
Replaceable & rechargeable battery handle

GCP base
Collect ground control point while scanning

X120^{GO} – Technical specifications

LiDAR	
Sensor model	Hesai XT16
Min range	0.5 m
Max range	120 m
Channels	16
Returns	2
Scanning point frequency	320.000
Field of view	360° x 270°
Laser class	1

X120^{GO} – Technical specifications

Accuracy	
Relative	Up to 6 mm *
Global	Up to 2 cm *
Global on UAV platform	<5 cm *

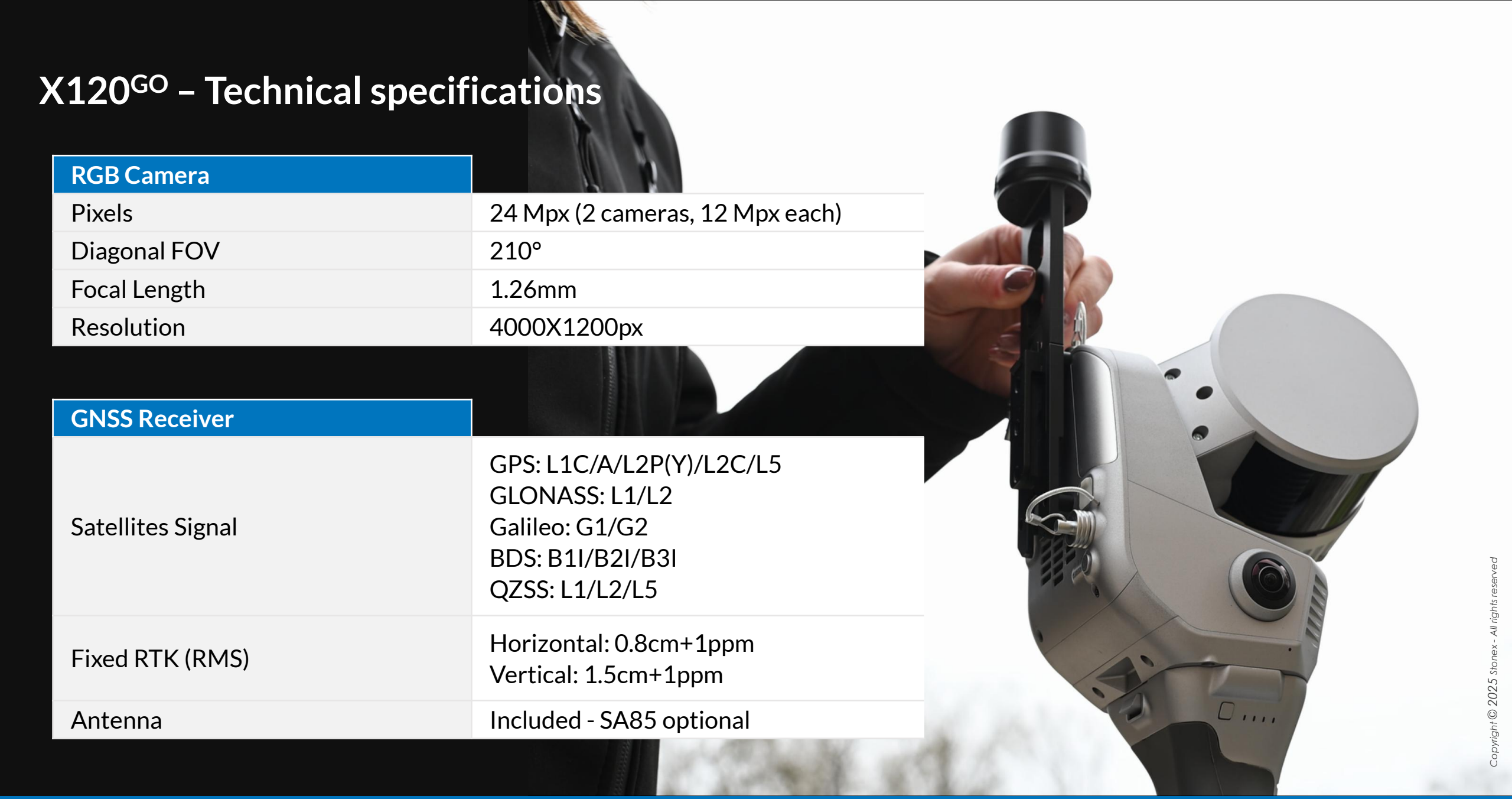
* In controlled environment

System	
Communication	Wi-fi, Bluetooth, USB type-c, Lemo
Data storage	512GB SSD
Operating time	1.2h (single battery)
Weight	1,6 kg (without battery) 2,1 kg (with battery)
Dimention	403,6 x 173,8 x 170 mm
Operating temperature	-20° C to +50° C (-4° F to 122° F)
Waterproof/Dustproof	IP54

X120^{GO} – Technical specifications

RGB Camera	
Pixels	24 Mpx (2 cameras, 12 Mpx each)
Diagonal FOV	210°
Focal Length	1.26mm
Resolution	4000X1200px

GNSS Receiver	
Satellites Signal	GPS: L1C/A/L2P(Y)/L2C/L5 GLONASS: L1/L2 Galileo: G1/G2 BDS: B1I/B2I/B3I QZSS: L1/L2/L5
Fixed RTK (RMS)	Horizontal: 0.8cm+1ppm Vertical: 1.5cm+1ppm
Antenna	Included - SA85 optional



X120^{GO} – Data capturing

GO*app*

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

The APP runs on Android and iOS devices.

GET IT ON Google Play

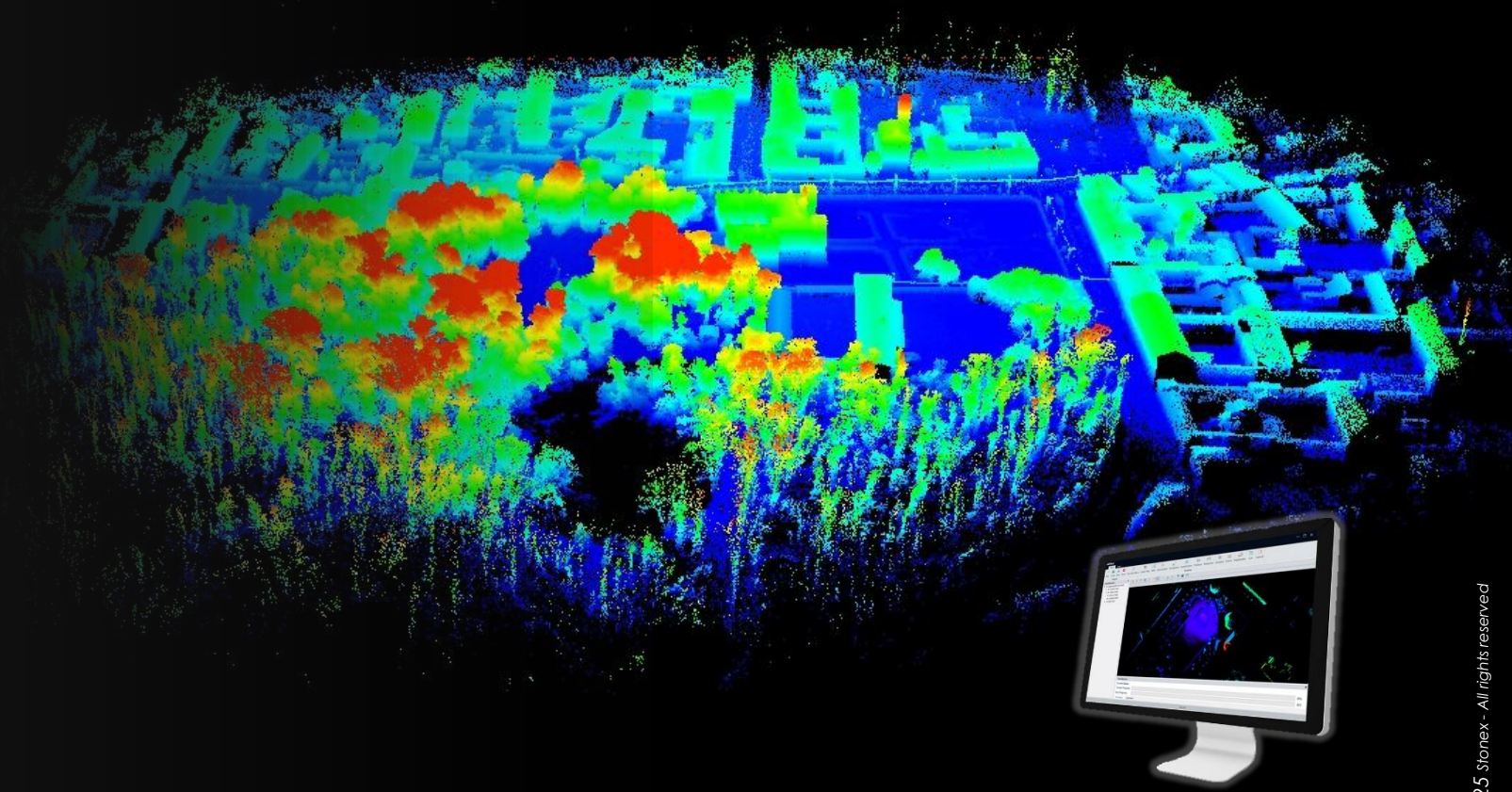
Download on the App Store

X120^{GO} – Data processing

GO*post*

Windows post processing software:

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

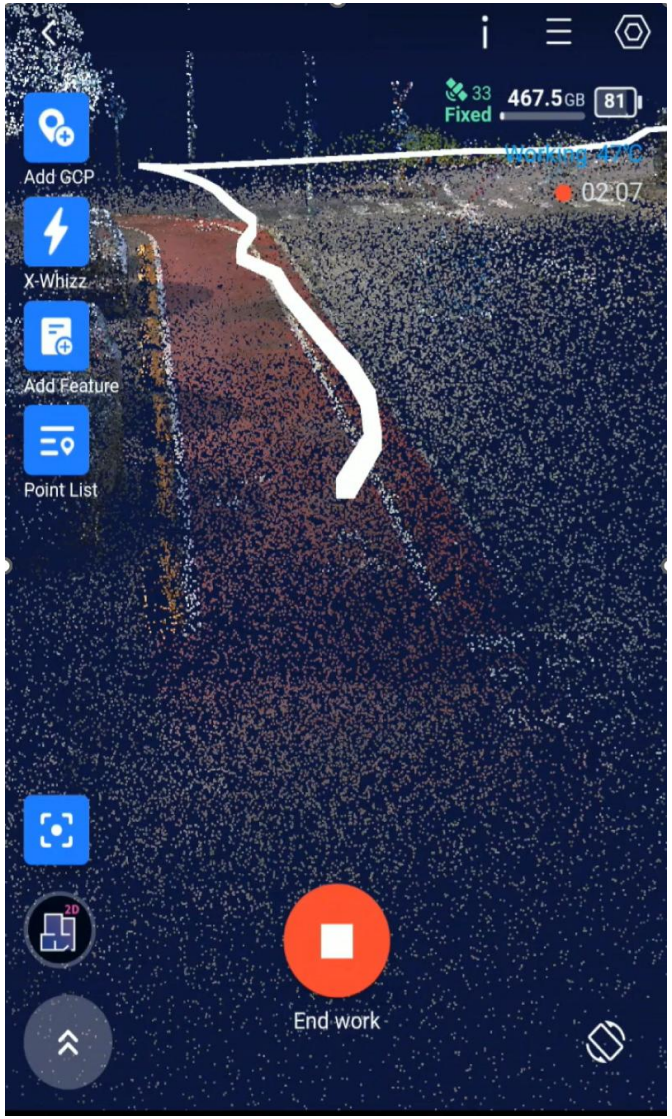


X120^{GO} – Features

Real time with asbolute coordinates

Real time coloring

Mapped and coloured results can also be generated on board.

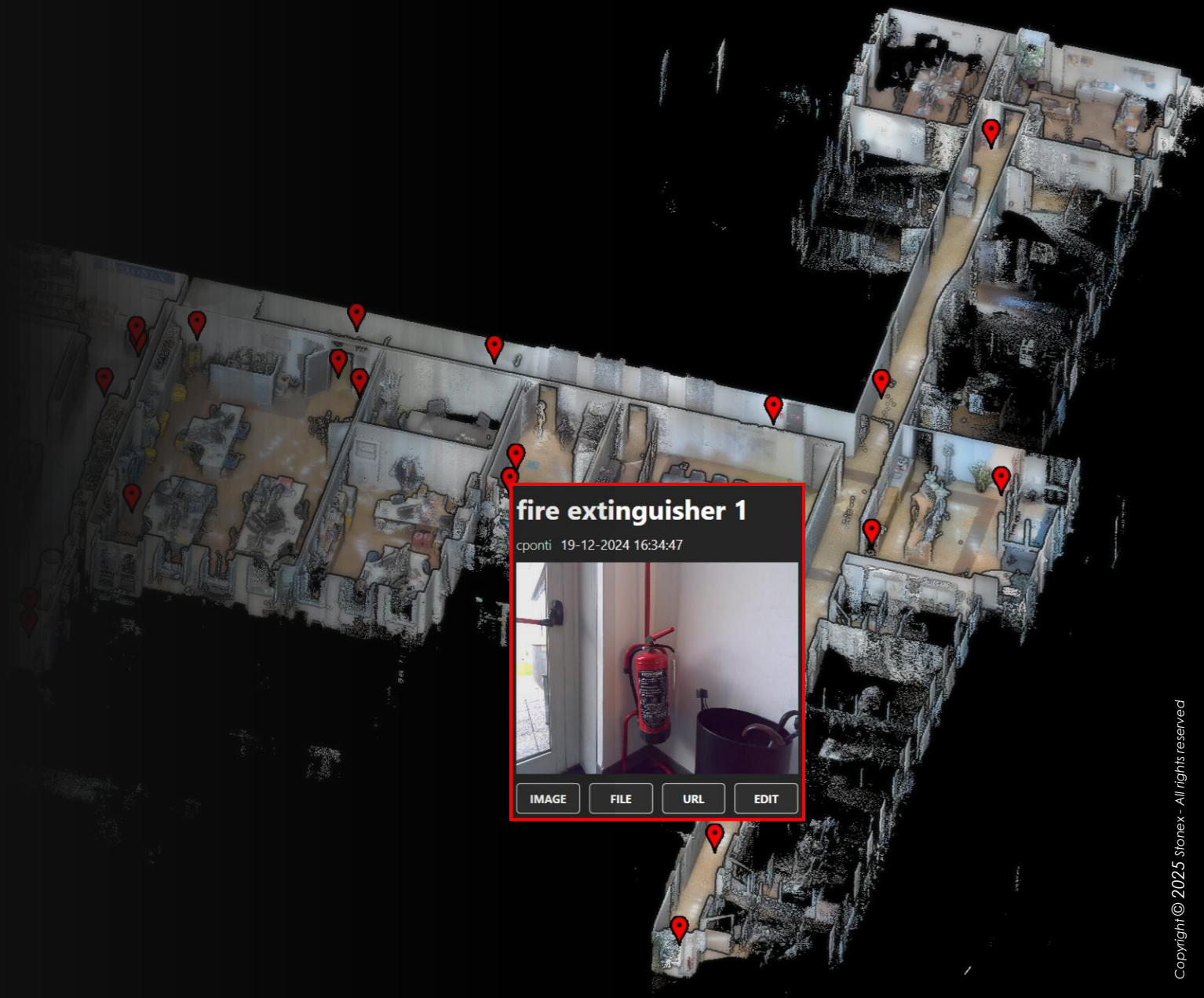


X120^{GO} – Geotags

As all the other Stonex SLAM devices, you can collect geotags during your survey.

While you are in the field, take photos and these will be located within the point cloud for later reference.

The perfect solution for facility management application!



X120^{GO} – Panoramic images

The 2 built-in 24 Mpx cameras can be used to generate spherical images.

Overlaid on the point cloud make measurements immediate.

Document every detail with an **immersive and intuitive view**.

Navigate within the 3D scene by moving between capture 'bubbles', as if you were physically on site.

Draw or take measurements directly **from the images**, simplifying inspection, verification and analysis tasks.

X120^{GO} – External camera

The integration of high-resolution 360° cameras enables extraordinary result in term of visual quality, introducing the technology of 3DGS.

	X120^{GO} built-in cameras	Insta360 X4/X5 DJI Osmo360
Point cloud texture	Minor differences	
Sperical image generation	18MPx	Higher resolution, basing on the camera
3D Gaussian Splatting	-	**Supported**

X120^{GO} – 3D Gaussian Splatting

Click to navigate the model

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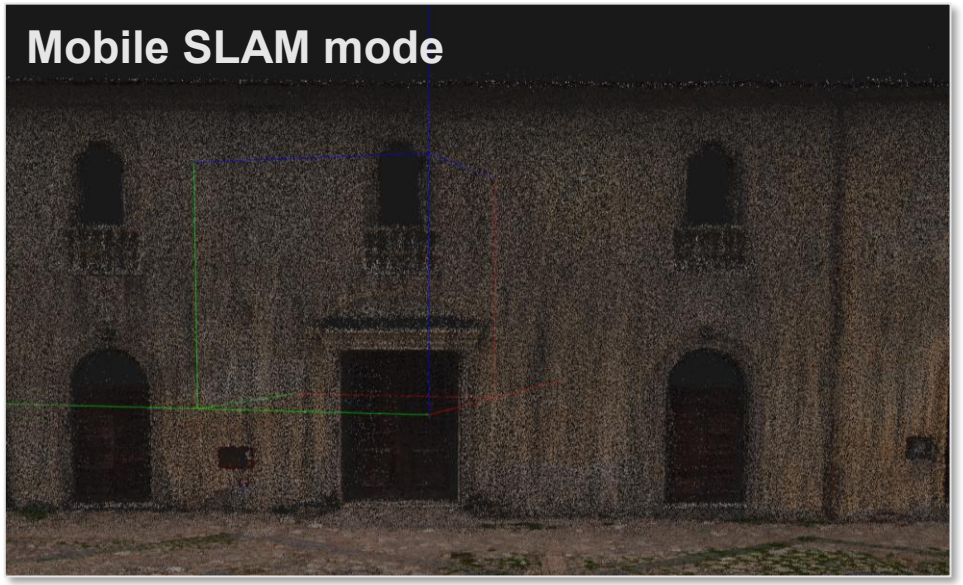
X120^{GO} – X-WHIZZ MODE

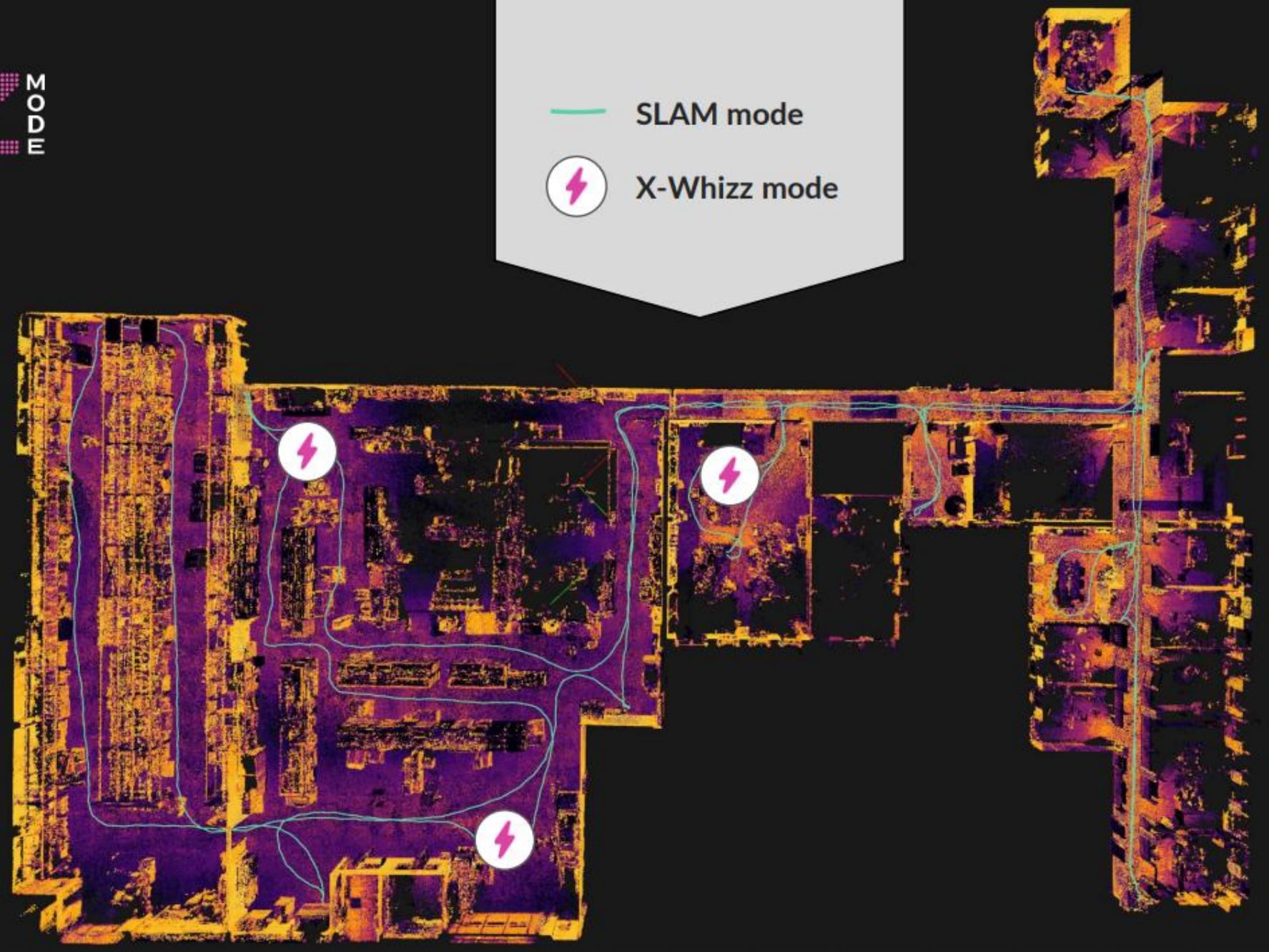
X120^{GO} combines mobile survey with stationary scans.

Walk around the scene to collect the entire point cloud. In the areas where you need more detail, stand still with the device to perform a static scan with the X-Whizz mode.

The perfect trade-off for who needs **speed and details** in a mobile survey!



X-WHIZZ MODE



Hybrid survey
SLAM + X-Whizz

SLAM: 8 minutes
X-Whizz: 80 secs each

X120^{GO} – UAV mount

Complete your survey by mounting the X120^{GO} to the DJI M300/M350 drones.

Simple and immediate setup: **ready to use in minutes**.

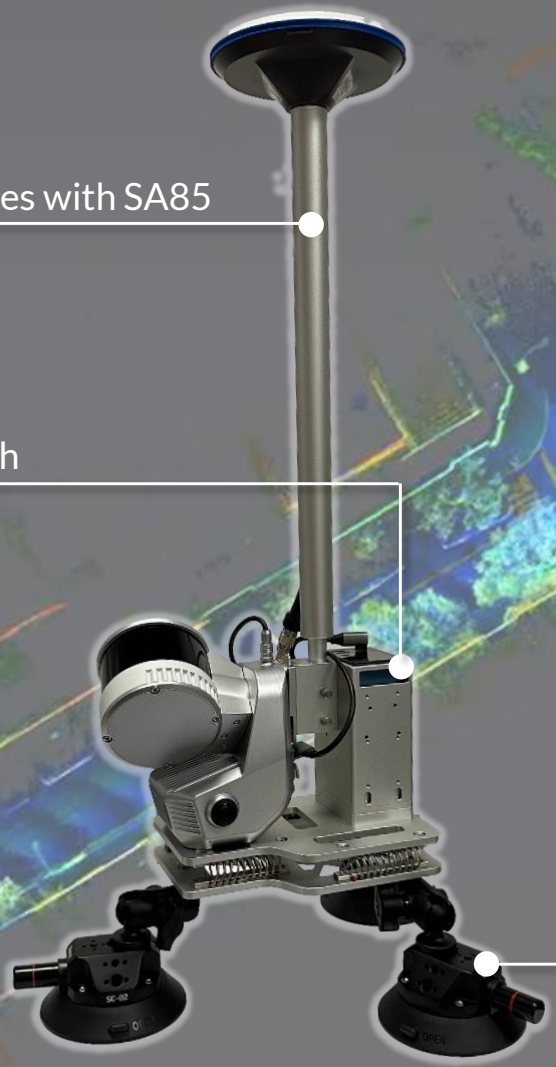
Power and **RTK corrections** - transmitted directly by the drone.

One flight, multiple returns -maximum detail, minimum effort.

X120^{GO} – Car mount

Geodetic antenna
Maximise GNSS performances with SA85

External power supply
Battery capacity: 25.700mAh



Suction cups | magnets
Choose the solution that suits you best

X120^{GO} – Comparison of two generations

	 v1	 v2
Built-in GNSS and realtime orientation	✕	✓
Cameras FOV	200°	360°
Built-in Panoramas	✕	✓
Realtime point cloud	Height map -	RGB color Oriented
Memory	SD card - 32 GB (expandable)	Internal - 512GB
Point cloud export	On PC	Onboard, On PC
Platforms	Hand, Backpack, Vehicle mount,	Hand, Backpack, Vehicle mount, DJIM300/M350
Mode	SLAM	SLAM + X-Whizz
Handle	Plastic with removable batteries	Aluminium alloy and rechargeable

Configuration

X120^{GO} – Configuration

	Product code	Description	Q.ty
	X120GO, SLAM Handheld laser scanner		
1	30-350850	X120GOv2, Transport case	1
2	30-350736	X40GO/X70GO/X120GOv2/X200GO, Battery handle	1
3	30-350737	X40GO/X70GO/X120GOv2/X200GO, GCP base	1
4	30-350740	X40GO/X70GO/X120GOv2/X200GO, Charger (EU,USA)	1
5	30-350741	X40GO/X70GO/X120GOv2/X200GO, power cable	1
6	30-350814	X120GOv2/X200GO, Quick release bracket	1
7	30-350815	X120GOv2/X200GO, Antenna	1
8	30-350657	GOpost, software dongle key	1

X120$^{GO}_{16\ channels}$ – Software Bundle Configuration

cube·3d

Product code	Description
B60-200484	X120GO v2-16 + Cube3D SCANNER

aplitop

Product code	Description
B60-200485	X120GO v2-16 + TCP PointCloud Editor

PointCab

Product code	Description
B60-200481	X120GO v2-16 + PointCab Essential (12 months)
B60-200482	X120GO v2-16 + PointCab Origins
B60-200483	X120GO v2-16 + PointCab Origins 3D

X120^{GO} – Accessories

Product code	Description
30-350777	X40GO/X70GO/X120GOv2/X200GO, Shoulders hook
30-350817	X120GOv2/X200GO, Tablet holder

X120^{GO} – X-Whizz pole

Product code	Description
30-350743	X70GO/X120GOv2/X200GO, Telescopic pole + tripod stand

X120^{GO} – Pano bracket

	Product code	Description
1	30-350851	X120GO/X200GO Pano bracket

Delivery in October 2025

1

Camera not included.

Supported models: Insta360 X5
Insta360 X4
DJI Osmo360

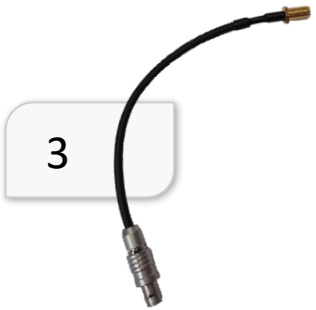
X120^{GO} – Radio modem compatibility

	Product code	Description
1	30-350819	X120GOv2/X200GO, Cable for SR02 radio

SR02 not included.

X120^{GO} – Backpack

	Product code	Description	Q.ty
	B30-000006	**X120GOv2/X200GO, Frame Backpack bundle**	
1	30-350755	SLAM, Frame backpack	1
2	30-357138	SA85, Geodetic antenna	1
3	30-350812	X120GOv2/X200GO, Cable for external antenna	1



X120^{GO} – UAV mount

	Product code	Description	Q.ty
1	30-350816	X120GOv2/X200GO, UAV platform for DJI M300/350	1
2 *	30-350727	DJI M300/350 Vibration isolator	4

* While it is highly recommended for the X200^{GO}, it is mandatory for the X120^{GO} due to the difference in payload the drone is required to carry

X120^{GO} – Vehicle mount

	Product code	Description	Q.ty
	B30-000007	**X120GOv2/X200GO, Vehicle mount bundle**	
1	B60-200425	X120GO/X200GO, Vehicle mount	1
2	30-357138	SA85, Geodetic antenna	1
3	30-350812	X120GO, Cable for external antenna	1

X120^{GO} – Services

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)
40-100215	SLAM Calibration certificate renewal (12months)
40-100209	SLAM Factory re-calibration

More info:

[Calibration Service]

Marketing

X120^{GO} – Unique Selling Proposition

STRONG SLAM ALGORITHM

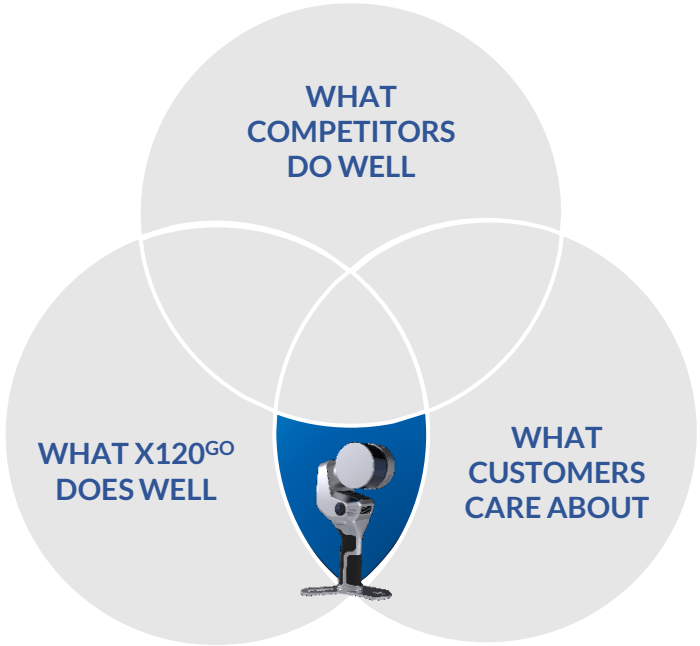
The hardware components for SLAM products are the same throughout the market. The uniqueness of Stonex SLAMs is in the stability and strength of the algorithm, which is able to reconstruct complex scenarios that are not trivial for this type of technology.

ALL IN ONE DEVICE

The embedded cameras (able to generate spherical images) and the GNSS board make the system complete.

WIDE RANGE OF ACCESSORIES

Backpack, shoulders hook, car mount and holder for DJI drones can complete the system.

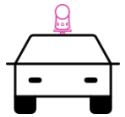
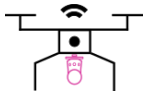


Stonex SLAM - Differences

Application	X200^{GO}- X120$^{GO}_{v2}$ 	X40^{GO}-X70^{GO} 
BIM & Real estate	✓	✓
Tunnel & Mining	✓	✓
Energy & Power	✓	
Facilities / Industrial	✓	✓
Mobile mapping	✓	
Forestry	✓	

* Limitations are mainly due to LiDAR range

Stonex SLAM - Differences

Platform	X120$^{GO}_{v2}$ 	X200^{GO} 	X70^{GO} 	X40^{GO} 
 GNSS	Built-in	Built-in	RTK module	-
 Backpack	✓	✓	✓	-
 Vehicle mount	✓	✓	-	-
 Pano camera	Built-in *or* Insta X4/X5 / DJI Osmo360	Built-in *or* Insta X4/X5 / DJI Osmo360	Insta X4/X5	Insta X4/X5
 UAV	DJI M350/M300	DJI M350/M300	-	-

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VISIT OUR WEBSITE
www.stonex.it

WE ARE HERE
Paderno Dugnano (Milano) - Italy

Questions that may arise

“One flight, multiple returns - maximum detail, minimum effort.”

Does this mean that with X120^{GO}, it's possible to collect both returns in a single flight?

Yes, thanks to firmware optimizations, this will soon be possible with X200^{GO} as well (in that case 3 returns).

“DJI Osmo360”

Is the DJI camera also compatible with other SLAM devices from Stonex?

At the moment, it's only compatible with X120$^{GO}_{v2}$ and X200^{GO} only; support for other systems is coming soon.

“Radio modem on the strap”

How to fasten the Radio modem to the strap? Is the strap included?

You can use any commercial camera mounting solution. Purchase an Arca Swiss quick release system to screw onto the radio, though a 1/4” screw. Then, attach the shoulder strap.