

HOVERMAP ST RANGE



Hovermap's product range has extended to ensure you have the right tool for the job. Building on the proven success of Hovermap's versatile autonomy and mapping capability, ST and ST-X models are available to extend the areas you can map and capture data.

All Hovermaps in the ST product range are designed with the tough, lightweight, IP65 weather sealed design giving you the confidence to capture harsher areas. The award winning Wildcat SLAM solution and Emesent autonomy algorithms ensure safety for the drone and asset, even in hazardous, GPS-denied environments. Emesent Aura, the integrated processing and visualization software, and its Automated Ground Control feature further increases the accuracy of Hovermap point clouds and enhance the capabilities of its SLAM-based mapping.



ROBUST, AUTONOMOUS CAPABILITY

Autonomy modes designed to suit your needs with pilot assist with omnidirectional collision avoidance or beyond line of sight Guided Exploration.



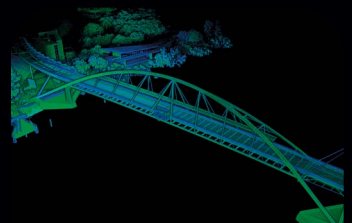
UNIQUE VERSATILITY AND DEPLOYMENT OPTIONS

The plug and play design allows easy switching from drone-based use to handheld, backpack-, vehicle-, or ground robot-mounted scanning.



LIVE STREAMED POINT CLOUD

Hovermap streams the live point cloud to the Hovermap app, allowing a real-time preview of the data as it is captured.



HIGH DENSITY DATASETS

Capture shadowless, dense, detailed point clouds of an entire complex asset and add a level of reality capture with Colorization (optional).

Hovermap **ST**

Hovermap **ST X**

emesent.com



HOVERMAP VERSATILITY

All products in the ST range have Hovermap's unique versatility that allows users to capture data from previously inaccessible areas, either from the air or on the ground. Accessories are compatible with both ST and ST-X, meaning if you expand your Hovermap fleet, you can use the same accessories on different Hovermaps.

Deployment options include:



HANDHELD



**DRONE
MOUNTED**



**VEHICLE
MOUNTED**



**BACKPACK
MOUNTED**



**GROUND ROBOT
MOUNTED**



WHAT ARE THE MAIN TECHNICAL SPECIFICATION DIFFERENCES?

There are a few key technical specification differences between ST and ST-X, which offers additional benefits to users.

	ST	ST-X	BENEFIT OF ST-X
MAPPING SPECIFICATIONS			
LiDAR range	0.40m to 100m 1.3 to 330 ft	0.50m to 300m 1.6 to 984 ft	The extended range captures more data points from further distances and reduces the time to scan larger areas.
LiDAR Precision	± 30 mm	± 10 mm	ST-X achieves a significant improvement in overall point accuracy - creating maps with more precisely defined features.
Mapping Accuracy	± 20 mm (3/4 in) in general environments	± 15 mm (19/32 in) in general environments	
	± 15 mm (19/32 in) in typical indoor and underground environments	± 10 mm (3/8 in) in typical indoor and underground environments	
	± 5 mm (7/32 in) isolated change detection capability	± 5 mm (7/32 in) isolated change detection capability	
LiDAR Channels	16	32	Doubling the number of Laser sensors, effectively doubles the resolution of map and is able to create a map of equivalent density (ST) in a reduced scan time.
LiDAR Data acquisition speed	Single Return Mode: up to 300,000 points/sec Dual Return Mode: up to 600,000 points/sec	Single Return Mode: up to 640,000 points/sec Multi Return Mode (3 return): up to 1,920,000 points/sec	A triple return mode, is important where a detection beam may traverse several layers - for example flying above forest canopies. Second and third returns will reveal additional ground detail underneath the forestry.
Storage	512 Gigabytes – approximately 8 hours of sensor data	512 Gigabytes – approximately 4 hours of sensor data	Datasets have more data points.
PHYSICAL SPECIFICATIONS			
Weight	1.6 kg (3.5 lb)	1.57kg (3.4 lbs)	The reduced weight improves ease-of-use.





HOVERMAP ST OR HOVERMAP ST-X, PLUS

HOVERMAP HARDWARE KIT

- Custom fitted tough case with space for accessories
- Hovermap handle and belt clip
- 1.5 m power cable (handle-mount/battery)
- 0.35 m power cable (drone/platform)
- V-Mount 98Wh, 14.8v 6600mAh battery
- Standard charger with international adaptors (US/Canada/Japan, AUS/NZ, and Europe)
- Emesent data processing licence key with Aura Lite software
- Hovermap scanning software USB

ENTITLEMENTS

- Hovermap Autonomy
- Hovermap Plus
- Hovermap Mapping

TRAINING & SUPPORT

- Introductory training session /video, and manual
- Global Support and Service

SOFTWARE

- Aura Software, with Automated Ground Control (GCP) and Colorization, is included in all subscription entitlements

ADDITIONAL HARDWARE

- Emesent Control Point targets
- GoPro and colorization kit
- Hovermap fitting kits for DJI M210 and M300
- Samsung tablet and tablet display kit for DJI Smart Controller

ACCESSORIES

- Backpack (hardcase for walking scans and storage)
- Cavity Monitoring System adaptor kit
- Long Range Radio
- Magnetic or Suction vehicle mounts
- Cage
- Telescopic Boom Pole