Topaz

Efficiently capture and localize information with your preferred sensors and vehicles while safely navigating complex, GPS-denied environments with the Topaz system.

Potential GPS-denied environments include:

- ▶ Tank Farm
- ▶ Tunnel
- ▶ Power
- ▶ Construction
- ▶ Mine
- ▶ Bridge
- ▶ Warehouse
- ▶ Greenhouse

Benefits

Rapid

No Delays: Real-time data gathering, what you need to know, when you need it.

Minimize Downtime: Get immediate data without losing millions a day during shutdown.

Precise

Go Where GPS Can't: Use immediately in any complex or confined environment without GPS or added infrastructure.

Use Your Sensors & Vehicle: Collect data using camera, IR, thermal, gas, and almost any sensor or vehicle.

Safe

Fly Safely: Feel confident relying on the system's ability to find a safe path in complex envoronments. Detects obstacles as small as 5cm.

Reduce Risk: Access dangerous areas without scaffolding or PPE.

Inspection Process Example – *Autonomous Tank Farm Inspection to Safely Detect, Locate, and Track Issues.*
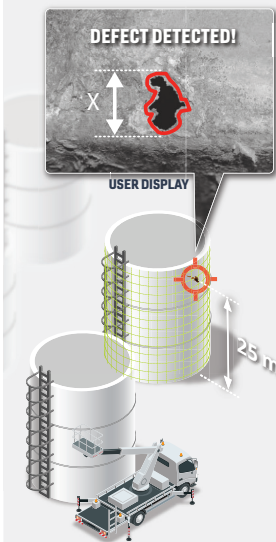
Plan flight *(first time only)*

Collect data safely & repeatably

Actionable analytics

DEFECT DETECTED!

USER DISPLAY

25 m

Take informed action

insights
address issues

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fly aware™ | *See other side for specifications, options and contact information >*

Lidar scanner

Topaz payload

Camera (for navigation)

IMU

Status light

Topaz functionality options

▸ Mapping: Safely capture 3D point clouds, even in GPS-denied environments
▸ Localization: Track 3D position and orientation
▸ Obstacle avoidance: Safe manual and autonomous flight is possible when coupled with a drone

Specifications:

Physical

Power:	19 v +/- 10 %; 100 W max
Weight:	1.4 kg (~3.1 lb)
Size:	16.5 x 12 x 13.97 cm (6.5 x 4.75 x 5.5 in)

All options include:

Detailed point cloud and data

Technical support

Inspection functionalities

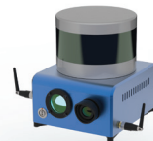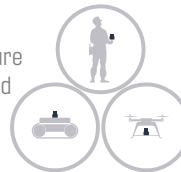## Connect with us to discuss:

Demonstration

Purchase

Partnership

TOPAZ m

Stand Alone Mapping Unit. Ideal lightweight mapping solution.

Apply power and capture point cloud maps by hand or mobile robots.

TOPAZ fs

Complete Autonomy & Mapping Flight System. Ideal for those seeking a turnkey end-to-end solution.

System includes a drone, sensor, ground control station (GCS), and a pilot controller.

TOPAZ i

Mapping & Autonomy Integration. Ideal for those who want to integrate Topaz with their vehicle and sensors.

Bring our technology and your vehicle and sensors together.