

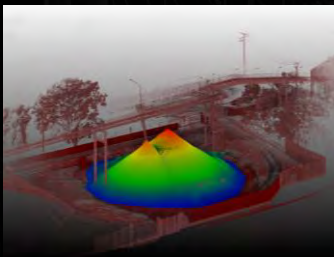
TerrusM

Introducing *TerrusM* by *AutoMap*

The worlds **most accurate** mobile SLAM System

TerrusM is designed to meet the challenging demands of subterranean mapping in Australia's mining industry. Building on CSIRO's CatPack sensor and the latest Wildcat SLAM engine, the TerrusM has been rigorously tested with Tier1 Australian mining customers. The CSIRO Data61 team used the CatPack sensors in the US DoD DARPA Subterranean Challenge in 2021 and generated the most accurate maps of any team.

AutoMap continues to extend the capabilities of the system, including multi-camera colorisation of the point clouds, an easy-to-use GCP/Target integration software system, and integration with our GeoFuse cloud platform.



- Mining
- Tunneling
- Subway Inspection
- Construction Verification
- Warehouse and Inventory
- Parking Structures
- Re-Construction
- Forestry
- Stockpiles

- Sub-2 cm accuracy and localisation precision
- 300,000 points per second
- 100m range LiDAR
- 120° Vertical Field-of-View LiDAR
- 360° Horizontal Field-of-View LiDAR
- Full 360° panoramic 4K color camera
- Vehicle mount scanning up to 30kph
- Backpack mounting option
- Ruggedised for Mining, Construction, Tunneling
- 3kg Total Weight
- Easy to use GCP/Target integration



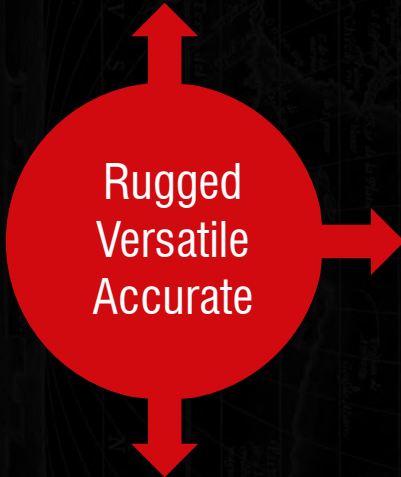
AutoMap

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TerrusM



Colorised Point Cloud at Mine Portal



The TerrusM is based on the CatPack, as seen here on a CSIRO Data61 robot in the DARPA SubT challenge

DARPA Single Most Accurate Report: **CSIRO Data61**

```
{
  "x": 21.4903,
  "y": 2.886,
  "z": -2.084,
  "type": "Drill"
}
```

Submitted Artifact Report

```
{
  "x": 21.45,
  "y": 2.903,
  "z": -2.064,
  "type": "Drill"
}
```

Actual Artifact Location

$\Delta x = 0.043$ m
 $\Delta y = -0.017$ m
 $\Delta z = -0.02$ m

➔ **Error = 0.048 m**

Most Accurate Map at the DARPA SubT Challenge, with 0% deviation