


UNAVCO Summary of Optech ILRIS-3D

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Retired October, 2012. No longer owned by UNAVCO

The ILRIS is a long range scanner (up to ~1500 m) and was UNAVCO's first TLS instrument, acquired in 2008. We specially outfitted this scanner for cold weather deployment and it was a tried and true instrument for polar applications. It was deployed in non polar environments as well.

| Back to TLS Comparison Table | TLS System | Min. Range | Max. Range | Repeatability | Power Draw |
|------------------------------------------------------------------------------------|-----------------|------------|------------|---------------|------------|
|  | Optech ILRIS-3D | 3 m | 1,500 m | 7 mm | 75 W |

Optech Resources

Technical Specs and Manual

- [Optech ILRIS website](#)
- [ILRIS-3D Technical Specs](#) (pdf) - Technical specifications for the ILRIS-3D.
- [ILRIS-3D Operation Manual](#) (pdf) - Covers topics such as basic set-up, operation and maintenance of the Optech ILRIS 3D Terrestrial Laser Scanner LiDAR system.

Software Manuals

PolyWorks

- [InnovMetric PolyWorks V10 Beginner's Guide](#) (pdf) - Contains the InnovMetric PolyWorks V10 Beginner's Guide.
- [TLS Manual - PolyWorks IMAlign v10](#) (pdf) - Shows the procedure to follow to align multiple scans into one point cloud.
- [TLS Manual - PolyWorks Error Map](#) (pdf) - By following these guidelines users can create

comparison maps or images to show differences in attributes within one scan (such as elevation differences).

Geo-referencing

- [TLS Manual - Geo-referencing in IMINSPECT](#) (pdf) - Instructions for geo-referencing in IMINSPECT.
- [TLS Manual - Geo-referencing in PolyWorks IMAAlign v9](#) (pdf) - Instructions for geo-referencing in IMAAlign.

Matchview

- [Matchview User Manual](#) (pdf) - Explains to users how to align range data with a color digital camera image.

Calculating Pit Volume

- [Calculating Pit Volume](#) (pdf) - This document provides an example of how to calculate changes in volume by creating a mesh of the object or area in question.

Software and Calibrations

Software

- controller.exe
- controllerce.exe
- [parser.zip](#)

Calibrations

- [Optech ILRIS-3D Offset, Geo-referencing, and Calibration Information](#)

Online URL: <https://kb.unavco.org/article/unavco-summary-of-optech-ilris-3d-801.html>