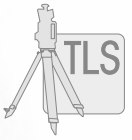


NEW



Infrared Camera Option for RIEGL VZ-i 3D Terrestrial Laser Scanners

INFRATEC VarioCAM® HD head 900

- » non-cooled industrial camera with 3.1 MPx (2.048x1536px) IR-resolution
- » recording and storage of IR frame rates up to 240 Hz
- » GigE and process interface
- » rugged light metal housing (IP67)

Key Features

- » infrared camera system compatible with RIEGL VZ-400i and VZ-2000i 3D Terrestrial Laser Scanners
- » calibrated mounting
- » GNSS on top
- » outdoor & indoor
- » easy to use - graphical user interface integration
- » no external power supply needed
- » surface temperature range -40°C up to 2000°C



Get your infrared camera data in 3D!

» **colorized by temperature**

» **full temperature information for each point**

» **export your point cloud in different formats with temperature informations included**



RIEGL VZ-400i with infrared camera mounted



www.riegl.com



Infrared Camera Data in RiSCAN PRO

RIEGL's RiSCAN PRO software is fully compatible and easy to use for colorization, read out temperature information and exporting your point clouds into different formats with the temperature attribute included.

point cloud colorization by temperature

» use option „view type“ to provide temperature colored scan data



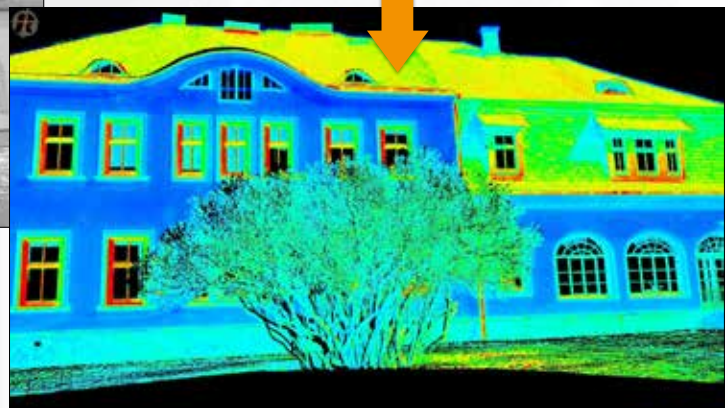
3D scan – reflectance colored

Point attribute: Temperature

Gradient min/max: 12.00 35.00 °C

Color below/above: Blue Red

Color gradient: [Color bar]



3D scan – temperature colored
(Data acquisition in the morning at lateral solar radiation)

temperature value for each measuring point

» read out the exact temperature of each single point

Timestamp	= 316.2607834 #
2018-04-05T10:32:49.4490074+02:00 (RTC)	
Target Index	= 1
Target Count	= 1
End of Scan Line	= 0
Full Waveform Analysis	= 0
Missing Facet	= 2
MTA Zone Assigned	= 1
MTA Zone Unknown	= 1
Scan Segment	= 1
Selected	= 0
Source Indicator	= 0
Start of Scan Line	= 0
Temperature	= 14.22 °C
True Color[0]	= 73
True Color[1]	= 63
True Color[2]	= 68
True Color[3]	= 1
Visible	= 1

export of highly informative data

» provide point clouds with the additional temperature attribute in various exchange formats

Export parameter: Description

- MTA Zone Ass... Index of assigned MTA zone. Nearest MTA zone has...
- Amplitude Echo signal amplitude
- Reflectance Target surface reflectance
- Target Index nth target of the laser shot (0 = unknown, 1 = first)
- Temperature Target temperature measured by thermal camera
- Full Waveform ... 1 for all points originating from a full waveform anal...
- MTA Zone Unkn... 1 for points with no MTA zone assigned, 0 for all poi...
- Source Indicator 0 for all points derived by standard waveform proc...
- End of Scan Line 1 for all points of the last laser shot of a scan line, 0...
- True Color[0] Point color derived from digital camera, 0: Red, 1: G...
- True Color[1] Point color derived from digital camera, 0: Red, 1: G...