# Accessory List
## *RIEGL* VZ-600i

**RIEGL**

# Overview

| Tripods | |
|---|---|
| Harsh Environment Carbon Tripod 165 Ne | ☐ |
| Lightweight Carbon Tripod 160In | ☐ |
| VZ-600i 3-Point Setup Stand with Adapter for Lightweight Carbon Tripod | ☐ |
| Quick-release mount for VZ-600i with 5/8" and 10 mounting holes | ☐ |
| Quick-release mount for VZ-600i with 5/8" | ☐ |
| Carbon Surveyor's Tripod | ☐ |
| Stable, Professional Tripod | ☐ |
| Tripod Star | ☐ |
| **GNSS Option** | |
| VZ-600i *RIEGL* GNSS RTK Receiver, **Ri-RTKM** | ☐ |
| VZ-600i *RIEGL* GNSS Receiver, **Ri-GNSS-t-L1** | ☑ |
| **Power Supply Options** | |
| AC Power Supply Unit for VZ-xx | ☑ |
| Battery-Pack Li-Ion RBLI 8S1P | ☐ |
| Dual Charger for *RIEGL* RBLI 8S1P | ☐ |
| Charging Station for *RIEGL* RBLI 8S1P | ☐ |
| Power Supply Cable 2 pole to cigarette lighter plug for V-Line, 2m | ☐ |
| Rechargeable NiMH Battery for External Power Supply | ☐ |
| Automatic Charger for External NiMH Battery | ☐ |
| Power Supply Cable, 7 pole to 2 pole for V-Line, 2m | ☐ |
| Adapter Cable, from banana plugs to power supply cable, 1m | ☐ |
| Adapter Cable, 1m, from 7 pole supply cable to 12 V PbGel battery ("quick action") | ☐ |
| Adapter Cable, 1m, from 7 pole supply cable to 12 V PbGel battery ("crocodile") | ☐ |
| **Camera and Camera Accessories** | |
| Sony ILX-LR1 Camera for use with *RIEGL* VZ-600i | ☐ |
| Sony Lens FE 14 mm F 1.8 GM | ☐ |
| *RIEGL* VZ-600i GNSS RTK Receiver with mount for Sony ILX-LR1, **Ri-RTKCM2** | ☐ |
| VZ-600i *RIEGL* camera mount for RICOH THETA Z1, **Ri-RTZ1CM2** | ☐ |
| VZ-600i *RIEGL* camera mount with RICOH THETA Z1, **Ri-RTZ1CM2** | ☐ |
| **Accessories for Transport and Protection** | |
| Scanner Carrying Case for VZ-600i | ☐ |
| Set of Protection Caps for VZ-600i | ☑ |
| Scanner "backpack" for carrying a 3D laser scanner VZ-i Series | ☐ |
| Scanner „backpack" for carrying a 3D laser scanner VZ-4000(i[25]) / 6000 | ☐ |
| **Retroflectors** | |
| Flat Circular Retroreflectors | ☑ |
| Cylindrical Retroreflectors | ☐ |
| Biaxial Bireflex Flat Circular Retroreflectors | ☐ |
| **Other Accessories** | |
| TCP/IP Cable M12-RJ45, 1m | ☑ |
| TCP/IP Cable M12-RJ45, 3m | ☐ |
| USB Debug Cable for VZ-600i | ☑ |
| CFexpressTM Typ B Card Reader for VZ-600i, with USB 3.2 Connection Cable | ☑ |
| CFexpressTM Card for VZ-600i | ☑ |
| **Service Options** | |
| Basic Service Package for VZ-600i | ☐ |

| | |
|---|---|
| Digital Camera Calibration Service for V-Line Scanner | ☐ |
| **Post-Processing Software** | |
| RiSCAN PRO Static LiDAR Data Processing | ☑ / ☐ |
| *RIEGL* Deep Learning Suite | |
| RiSOLVE Static LiDAR Data Processing for Rapid Response | ☐ |
| RiMINING Static LiDAR Data Processing for Mining | ☐ |
| **Post-Processing Software \| Plug-Ins** | |
| RiPANO Publishing | ☐ |
| LIS Tree Analyzer Plug-In | ☐ |
| LIS GeoTec Plug-In | ☐ |
| Static Multi Station Adjustment License | ☐ |
| RiSCAN PRO Kinematic Data Processing | ☐ |
| RiUNITE – RiWORLD functionality, LIGHT | ☐ |
| Extended Maintenance for RiUNITE – RiWORLD functionality, LIGHT | ☐ |
| ***RIEGL* Post-Processing \| Apps** | ☐ |
| *RIEGL* Monitoring Apps for VZ-i Series (Monitor +, Monitoring, DesignCompare, SlopeAngle) | ☐ |

☑ *… indicated items are part of the scanner basic configuration*
☐ *… optional items*

# *Tripods*

### Harsh Environment Carbon Tripod 165 Ne

⊘ Part-No. HW-GP-06-586-00

maximum load 30 kg
weight: 2.5 kg
height: 165 cm

The tripod has a spike on each leg that can be unscrewed if desired.

### Lightweight Carbon Tripod 160ln

⊘ Part-No. HW-GP-06-590-00

maximum load: 30 kg
weight: 2.2 kg
height: 160 cm

### VZ-600i 3-Point Setup Stand with Adapter for Lightweight Carbon Tripod

⊘ Part-No. HW-VZI-06-009-00

weight: 0.22 kg

### Quick-release mount for VZ-600i with 5/8" and 10 mounting holes

⊘ Part-No. HW-VZI-06-023-00

weight: 0.45 kg

with locking bolt
4x mounting holes with a diameter of 5,5 mm
6x mounting holes with M5 thread

### Quick-release mount for VZ-600i with 5/8"

⊘ Part-No. HW-VZI-06-030-00
weight: 0.2 kg

## Carbon Surveyor's Tripod

⊙ Part-No. HW-GP-06-474-00

maximum load: 22 kg
weight: 4.9 kg
height: 193 cm

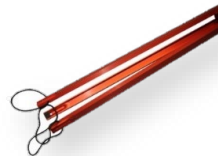

## Stable, Professional Tripod

⊙ Part-No. HW-GP-06-370-00

weight 7.60 kg
height: 170 cm



## Tripod Star for Operation on Smooth Surfaces

⊙ Part-No. HW-GP-06-001-00

weight: 0.35 kg

## GNSS Options

**VZ-600i *RIEGL* GNSS RTK Receiver, Ri-RTKM**

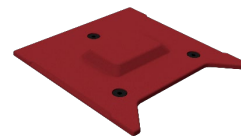> Part-No. HW-VZI-06-008-00

weight: 0.62 kg



**VZ-600i *RIEGL* GNSS Receiver, Ri-GNSS-t-L1**

> Part-No. HW-VZI-06-016-00

- L1-Band, 4 concurrent GNSS (GPS, GLONASS, Galileo, BeiDou)
- GNSS on Top

weight: 0.09 kg

# *Power Supply Options*

## AC Power Supply Unit for VZ-xx

⊙ Part-No. HW-VZXX-04-000-00

For *RIEGL* VZ-xx, 100 - 240 V AC, 50 - 60 Hz
- for direct operation of the scanner from main power supply
- for supplying e.g. the
  - Dual Charger
    (Part-No. HW-VZXX-04-010-00) or
  - Charging Station
    (Part-No. HW-VZXX-04-011-00)



symbolic image – EU version

weight: 0.43 kg

## Battery-Pack Li-Ion RBLI 8S1P

⊙ Part-No. HW-VZXX-04-009-00

- Li-Ion 28.8 V Technology
- Capacity 99 Wh, 3.45 Ah
- Battery pack life typ. 500 - 600 charging cycles



weight: 0.46 kg

## Dual Charger for *RIEGL* RBLI 8S1P

⊙ Part-No. HW-VZXX-04-010-00

Provides the possibility to charge up to 2 (two) *RIEGL* RBLI 8S1P batteries at the same time

- Input Supply Voltage 11-34 V
- Charging time 2,75 h for two batteries
- Size 94 x 42 x 170 (mm)
- **RBLI 8S1P batteries (Part-No. HW-VZXX-04-009-00) and AC Power Supply Unit (Part-No. HW-VZXX-04-000-00) not included**



weight: 0.26 kg

**Charging Station for *RIEGL* RBLI 8S1P**

⊙ Part-No. HW-VZXX-04-011-00

Provides the possibility to charge up to 6 *RIEGL* RBLI 8S1P batteries at the same time

Input Supply Voltage 11-34 V
Charging time
- up to 3 batteries 2,75 h
- 4 batteries 4,5 h
- 6 batteries 5,5 h
Size 350 x 295 x 150 (mm)
AC Power Supply Unit
(Part-No. HW-VZXX-04-000-00) included
RBLI 8S1P batteries
(Part-No. HW-VZXX-04-009-00) not included

weight: 3.70 kg



**Power Supply Cable 2 pole to cigarette lighter plug for V-Line, 2m**

⊙ Part-No. HW-VXX-03-052-00

Compatible with e.g.
- Dual Charger
(Part-No. HW-VZXX-04-010-00) or
- Charging Station
(Part-No. HW-VZXX-04-011-00)

weight: 0.16 kg



**Rechargeable NiMH Battery for External Power Supply**

⊙ Part-No. HW-GP-04-000-00

13.2 V, 18 Ah, 238 Wh, with fuse

weight: 3.37 kg



*intended for combined use!*

**Automatic Charger for External NiMH Battery**

⊙    Part-No. HW-GP-04-001-00

100 - 240 V AC, short circuit proof

weight: 0.75 kg



**Power Supply Cable, 7 pole to 2 pole for V-Line, 2m**

⊙    Part-No. HW-VXX-03-011-01

weight: 0.25 kg



**Adapter Cable, from banana plugs to power supply cable, 1m**

⊙    Part-No. HW-GP-03-004-00

- Compatible with Power Supply Cable (Part-No. HW-VXX-03-011-01)

weight: 0.12 kg
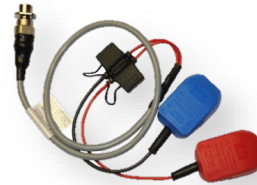


*intended for combined use!*

**Adapter Cable, 1m, from 7 pole supply cable to 12 V PbGel battery ("quick action")**

⊙ Part-No. HW-GP-03-006-00

- Compatible with Power Supply Cable (Part-No. HW-VXX-03-011-01)
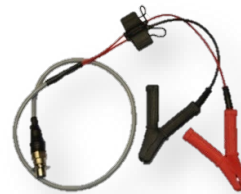- with "quick action" battery pole connectors

weight: 0.35 kg

**Adapter Cable, 1m, from 7 pole supply cable to 12 V PbGel battery ("crocodile")**

⊙ Part-No. HW-GP-03-007-00

- **Compatible with Supplly Cable (Part-No. HW-VXX-03-011-01)**Compatible with Power Supply Cable (Part-No. HW-VXX-03-011-01)
- with "crocodile" battery pole connector

weight: 0.32 kg

## *Camera and Camera Accessories*

| | |
|---|---|
| **Sony ILX-LR1 Camera for use with *RIEGL* VZ-600i**<br><br>⊙ Part-No.: HW-CAM-09-022-00<br><br>weight: 0.24 kg |  |
| **Sony Lens FE 14 mm F 1.8 GM**<br><br>⊙ Part-No. HW-CAM-10-071-00<br><br>weight: 0.5 kg |  |
| ***RIEGL* VZ-600i GNSS RTK Receiver with mount for Sony ILX-LR1, Ri-RTKCM2**<br><br>⊙ Part-No.: HW-VZI-06-018-00<br><br>• GNSS corrections received via WLAN<br>• Sony ILX-1LR camera is not included<br><br>weight: 0.80 kg |  |

**VZ-600i *RIEGL* camera mount for RICOH THETA Z1, Ri-RTZ1CM2**

⊙ Part-No. HW-VZI-06-019-00

- power supplied via scanner
- with integrated GNSS L1 receiver
- easy to mount on the scanner
- RiOCH THETA Z1 camera is not included

weight: 0.4 kg

**VZ-600i *RIEGL* camera mount with RICOH THETA Z1, Ri-RTZ1CM2**

⊙ Part-No. HW-VZI-06-019-01

- power supplied via scanner
- with integrated GNSS L1 receiver
- easy to mount on the scanner
- with USB

weight: 0.6 kg

# Accessories for Transport and Protection

## Scanner Carrying Case for VZ-600i

➤ Part-No. HW-VZXX-05-016-00

With 4 hinged handgrips and wheels, splash-proof, foam lined to fit shape of the *RIEGL* VZ-600i scanner with camera and cables.

Dimensions: 570 x 320 x 250 mm

weight: 5.10 kg



## Set of Protection Caps for VZ-600i

➤ Part-No. HW-VZXX-06-098-00

weight: 0.02 kg



## Scanner "backpack" for carrying a 3D laser scanner VZ-i Series

➤ Part-No. HW-GP-06-459-01

- standard backpack for transporting a *RIEGL* VZ-400i, VZ-2000i, VZ-600i with mounted Ri-RTKM

weight: 2.30 kg



## Scanner „backpack" for carrying a 3D laser scanner VZ-4000(i[25]) / 6000

➤ Part-No. HW-GP-06-458-01

- standard backpack for transporting a *RIEGL* VZ-600i, VZ-4000, VZ-4000i[25], VZ-6000

weight: 2.70 kg
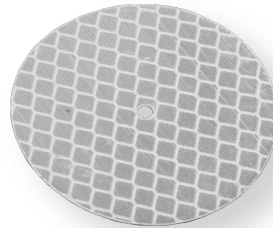
# *Retroreflectors*

**Flat Circular Retroreflectors**

Included in the Scanner Basic Configuration:

> Part-No. HW-GP-06-002-01
> (25 pieces, 50 mm)

Not Included in the Scanner Basic Configuration:

> Part-No. HW-GP-06-002-00
> (100 pieces, 50 mm) weight: 0.15 kg
> Part-No. HW-GP-06-003-00
> (100 pieces, 100 mm) weight: 0.40 kg



**Cylindrical Retroreflectors**

> Part-No. HW-GP-06-271-00
> (50 x 50 mm) weight: 0.35 kg
> Part-No. HW-GP-06-274-00
> (100 x 100 mm) weight: 1.10 kg

- 5 pieces each



**Biaxial Bireflex Flat Circular Retroreflectors**

> Part-No. HW-GP-06-454-00

- 50 mm each
- mounted on universal joints

weight:0.07 kg

# *Other Accessories*

**TCP/IP Cable M12-RJ45, 1m**

  Part-No. HW-GP-03-055-00

weight: 0.15 kg



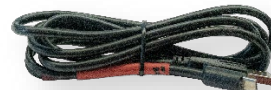**TCP/IP Cable M12-RJ45, 3m**

  Part-No. HW-GP-03-056-00

weight: 0.25 kg



**USB Debug Cable for VZ-600i, 1.5m**

  Part-No. HW-VZ-03-000-00

weight: 0.05 kg



**CFexpress™ Typ B Card Reader for VZ-600i, with USB 3.2 Connection Cable**

  Part-No. HW-VZI-06-010-00

weight: 0.22 kg



**CFexpress™ Card for VZ-600i**

  Part-No. HW-VZI-06-011-00 (512 GB)

  Part-No. HW-VZI-06-011-01 (1 TB)

CFexpress™ Typ B

weight: 0.02 kg

# *Service Options*

## Basic Service Package for VZ-600i

⊗  Part-No. HW-VZ600-11-000-00

It is recommended at basic service intervals of
- 3000 hours of total scan operating time OPTIME[2] or OPTIME[3]
  (= scanning mechanism in operation)
- or 2 years

whichever occurs earlier.

It comprises:
1. unpacking and cleaning of the instrument
2. laying out of service paper work
3. first functional check
4. cleaning of the beam exit window
5. Installation of firmware upgrades (if applicable)
6. check or re-calibration of the optional adjustment (range-finder unit)
7. check or re-calibration of the scanner at the *RIEGL* test field
8. check or re-calibration of the orientation sensors at the *RIEGL* test field
9. check or re-calibration of the internal camera calibration
10. test of max. measurement range
11. final instrument check at the *RIEGL* test area
12. preparation of calibration and test certificates
13. repacking the instrument for shipment

## Digital Camera Calibration Service for V-Line Scanner (Sony ILX / Sony 7RIV)

⊗  Part-No. ST-GP-11-002-00

Provides complete set of camera calibration parameters for use in RiSCAN PRO including internal calibration, lens distortion parameters and mounting calibration parameters. Parameters are delivered within a RiSCAN PRO project. Calibration statistics included (available for camera-lens combinations as recommended by *RIEGL* LMS).

# *Post-Processing Software*

**RiSCAN PRO**
**Static LiDAR Data Processing**

⮞ **Instrument Serial Number License (SNL)**
Part-No. SW-TLS-07-000-00

Included in the scanner basic configuration

⮞ **Floating License Package (SIL)**
Part-No. SW-TLS-07-001-00

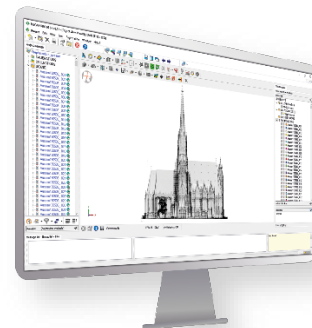RiSCAN PRO Instrument Serial Number License mandatory

[Click or scan for the specifications!](#)

Extended Maintenance for RiSCAN PRO Static LiDAR Data Processing

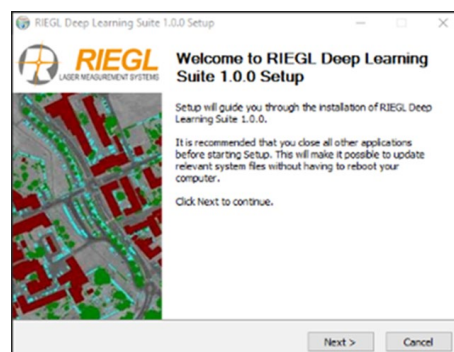⮞ **Instrument Serial Number License (SNL)**
Part-No. SW-TLS-12-000-00

⮞ **Floating License Package (SIL)**
Part-No. SW-TLS-12-001-00

**RIEGL Deep Learning Suite**
**Image Content Anonymization**

⮞ **Instrument Serial Number License (SNL)**
Part-No. SW-GP-07-009-00

⮞ **Floating License Package (SIL)**
Part-No. SW-GP-07-010-00

**RiSOLVE Static LiDAR Data Processing for Rapid Response**

> **Instrument Serial Number License (SNL)**
> Part-No. SW-TLS-07-004-00

> **Floating License Package (SIL)**
> Part-No. SW-TLS-07-005-00

Click or scan for the specifications!

Extended Maintenance for RiSOLVE Static LiDAR Data Processing for Rapid Response

> **Instrument Serial Number License (SNL)**
> Part-No. SW-TLS-12-004-00

> **Floating License Package (SIL)**
> Part-No. SW-TLS-12-005-00

**RiMINING Static LiDAR Data Processing for Mining**

➤ **Instrument Serial Number License (SNL)**
Part-No. SW-TLS-07-002-00

➤ **Floating License Package (SIL)**
Part-No. SW-TLS-07-003-00

Click or scan for the specifications!

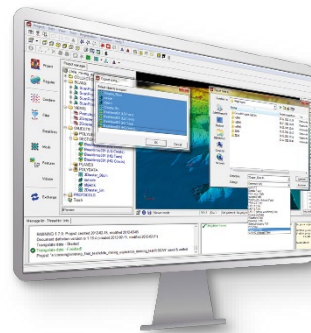Extended Maintenance for RiMINING Static LiDAR Data Processing for Mining

➤ **Instrument Serial Number License (SNL)**
Part-No. SW-TLS-12-002-00

➤ **Floating License Package (SIL)**
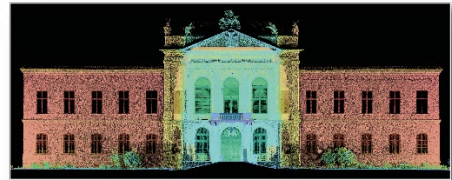Part-No. SW-TLS-12-003-00

# *Post-Processing Software | Plug-Ins*

## RiPANO Publishing

➤ **Instrument Serial Number License (SNL)**
Part-No. SW-TLS-07-006-00

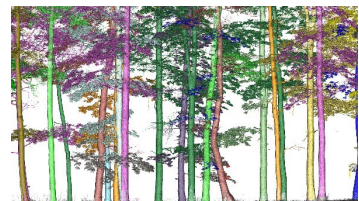➤ **Floating License Package (SIL)**
Part-No. SW-TLS-07-007-00

Click or scan for the specifications!



## LIS TreeAnalyzer Plug-In

➤ **Instrument Serial Number License (SNL)**
Part-No. SW-TLS-07-015-00

➤ **Floating License Package (SIL)**
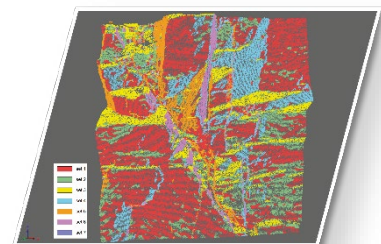Part-No. SW-TLS-07-014-00



## LIS GeoTec Plug-In

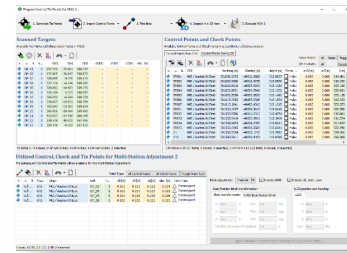➤ **Instrument Serial Number License (SNL)**
Part-No. SW-TLS-07-008-00

➤ **Floating License Package (SIL)**
Part-No. SW-TLS-07-009-00

Click or scan for the specifications!

## Static Multi Station Adjustment License

⊙ **Instrument Serial Number License (SNL)**
Part-No. SW-TLS-07-010-00

⊙ **Floating License Package (SIL)**
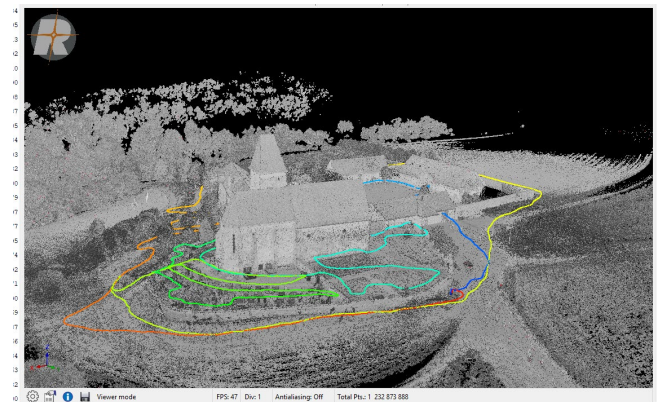Part-No. SW-TLS-07-011-00

## RiSCAN PRO Kinematic Data Processing

⊙ **Instrument Serial Number License (SNL)**
Part No. SW-TLS-07-012-00

⊙ **Floating License Package (SIL)**
Part No. SW-TLS-07-013-00

## RiUNITE – RiWORLD functionality, LIGHT



⊙ **Instrument Serial Number License (SNL)**
Part-No. SW-GP-02-158-00

⊙ **Floating License Package (SIL)**
Part-No. SW-GP-02-157-00

## Extended Maintenance for RiUNITE – RiWORLD functionality, LIGHT

⊙ **Instrument Serial Number License (SNL)**
Part-No. SW-GP-12-151-00

⊙ **Floating License Package (SIL)**
Part-No. SW-GP-12-150-00

**RIEGL**

# *RIEGL Post-Processing | Apps*

**RIEGL Monitoring Apps for VZ-i Series (Monitor +, Monitoring, DesignCompare, SlopeAngle)**

Part No. SW-GP-02-102-00

Three easy-to-use to innovative apps, which support users in their daily work, especially in critical situations. Visualization of the results via GUI or web viewer for detailed analysis.

- Monitor + App: Monitoring of surface and targets/prisms in one. A flexible solution for permanent, periodic, and sporadic data acquisition.
- Monitoring App: Data comparison and visualization of differences to a reference data set.
- Design Compare App: Data comparison to a given 3D design model. Visualization of undercut and overcut.
- Slope Angle App: Calculation and visualization of local slope angles.

[Click or scan for the specifications!](#)

**RIEGL**