



Picture 1

Picture 2



Picture 3



Picture 4



Picture 5



NiLas

Non tiltable Laser distance Measuring Instrument For DISTO plus, classic 5/5a and DISTO pro 4/4a

To define horizontal distances

Application:

The high accuracy of the DISTO is often spoiled due to the use by hand. For geodesic applications, the distance from a ground point to an object point can be exactly defined by using the DISTO with the NiLas. This would prevent the need of support by an assistant. Dangerous situations like for example measuring with a measuring band over a street with a lot of traffic can be minimised. It is very suitable for doing GPS measurements of eccentric object points, if there is no need to determine the altitude (see reference System KiLas).

The Laser distance Measuring Instrument will be put on a platform and can be easily fixed by a quick clamp (picture 3). There is no need any more for screwing a screw in the rear photo thread, so that the DISTO is immediately ready again for new measurements by hand.

The NiLas can be attached on poles of all types (prism poles, ranging poles, GPS poles, etc.) by using a clamp screw (picture 4).

The eventual need to adapt the height will be accomplished by moving the NiLas on the pole or by the telescopic extension.

Equipment:

- Clamp to quickly attach the DISTO (picture 3)
- Universal clamp screw (picture 4) to attach on poles available in 2 sizes: **for poles with a diameter from 18 – 32 mm and from 30 to 45 mm.**
- Exact and clearly defined relation between the clamp screw (pole axis) and the start point of the distance measurement
- The attachment at the side of the pole allows the use of a telescope view finder and reading the measured data with high as well as with low DISTO.
- The horizontal position of the laser beam of the Disto can be adjusted with a clamp screw (picture 5).
- The clamping can be attached to the pole in an angle of 90°. This allows vertical measurements.

The telescopic view finder BFT4 can be used!

NiLas for DISTO plus, classic 5 – for pole Ø 18-32 mm	Order-No. 2370.5	145,- €
NiLas for DISTO plus, classic 5 – for pole Ø 30-45 mm	Order-No. 2370.G5	145,- €
NiLas for DISTO pro 4/4a – for pole Ø 18-32 mm	Order-No. 2370.4	145,- €
NiLas for DISTO pro 4/4a – for pole Ø 30-45 mm	Order-No. 2370.G4	145,- €

Without DISTO! Delivery in combination with DISTO upon request!

NiLas for older DISTO types upon request!



Picture 1
(Kilas+)



Picture 2
(Kilas-)

KiLas®

Tiltable Laser Distance Measuring Instrument For DISTO plus, classic 5/5a and DISTO pro 4/4a

KiLas-® (without inclination measuring instrument):

Optimal use of the functions integrated in the DISTO.

KiLas+® (with inclination measuring instrument):

Optimal use of the functions integrated in the DISTO and additional possibility to calculate horizontal distances and differences in altitudes.

Application:

In comparison to the NiLas, the system **KiLas®** offers a broader range of applications. Whereas with NiLas only horizontal distances can be measured, the comfortable tilting mechanism of KiLas allows the secure centring of the laser beam to every visible object point. By this, a lot of **DISTO internal functions (e.g. minimum/maximum tracking, definition of latitude and altitude) can optimally be applied.** As the axis of the tilting mechanism goes through the laser beam axis, **no errors can be produced like when using a photo tripod** (see instructions for use of DISTO). The start point of the distance measurement is clearly defined and does not “wander” depending of the tilting angle. There is no need for sensitive special arrangements.

In addition, the **KiLas+®** with inclination measuring instrument has also **the possibility to convert oblique distances into horizontal distances with differences in altitude.** The measurement of eccentric object points with the GPS measurement can be done because of the tilting possibility also under difficult conditions (see enclosed literature reference).

The laser distance measuring instrument of KiLas® will be fixed very quickly with a clamp (picture 3) the same as with the system NiLas. There is no time consuming change from one-hand-measuring to KiLas measuring.



Picture 3



Picture 4



Picture 5

Technical data:

General comments:

- Clamp to quickly attach the DISTO (picture 3)
- Universal clamp screw (picture 4) to attach on poles available in 2 sizes:
for poles with a diameter from 18 – 32 mm and from 30 to 45 mm.
- Exact and clearly defined relation between the clamp screw (pole axis) and the start point of the distance measurement
- The attachment at the side of the pole allows the use of a telescope view finder and reading the measured data with high as well as with low DISTO.
- Comfortable tilting mechanism with turning handle for definition of the tilting resistance (picture 5)
- The KiLas can be rotated by 360°. This allows also measurements in position II. The laser beam goes always through the rotation axis.
- The optional telescope view finder can be watched optimally.

KiLas-® (without inclination measuring instrument):



The telescope view finder BFT₄ can be used!

KiLas for DISTO plus, classic 5 – for pole Ø 18-32 mm	Order-No. 2380.5	245,- €
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KiLas for DISTO plus, classic 5 – for pole Ø 30-45 mm	Order-No. 2380.G5	245,- €
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The KiLas for the DISTO pro 4/4a is additionally equipped with a spirit level to measure horizontal targets (the Classic 5 has a spirit level integrated in the casing).

KiLas for DISTO pro 4/4a – for pole Ø 18-32 mm	Order-No. 2380.4	245,- €
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KiLas for DISTO pro 4/4a – for pole Ø 30-45 mm	Order-No. 2380.G4	245,- €
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Without DISTO! Delivery in combination with DISTO upon request!

KiLas+® (with inclination measuring instrument):

By reading them on the inclination measuring instrument, the measured oblique distances can be converted into horizontal distances with differences in altitude. However, as the inclination measuring instrument has no interface, the use of a calculator is necessary. As an alternative, the vertical angle can be entered in the hand controller and can then be evaluated with the program.

The technical data of the inclination measuring instrument:

- Measuring of the altitude angle in (Alt) degrees in position I and II
- Reading in 0,1° steps, accuracy 0,3°, change of the number positioning for measurements >90°
- Simple way to calibrate.
- No interface

The telescope view finder BFT₄ can be used!



KiLas+® for DISTO plus, classic 5 – for pole Ø 18-32 mm	Order-No. 2390.5	345,- €
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KiLas+® for DISTO plus, classic 5 – for pole Ø 30-45 mm	Order-No. 2390.G5	345,- €
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KiLas+® for DISTO pro 4/4a – for pole Ø 18-32 mm	Order-No. 2390.4	345,- €
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KiLas+® for DISTO pro 4/4a – for pole Ø 30-45 mm	Order-No. 2390.G4	345,- €
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Without DISTO! Delivery in combination with DISTO upon request!

KiLas+® for older DISTO types upon request!

Accessories for all DISTO types

Telescope view finder BFT ₄	Order-No. 2350	170,- €
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Level GLI 22	Order-No. 2360	16,- €
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DIN-stub axis 5/8"-1/4"

with a dual function as stub axis and socket adapter:

- Use of the DISTO on tribrach tripods with ZEISS centring
- Use of the DISTO for poles with 5/8" thread.

DIN-stub axis 5/8" – 1/4"	Order-No. 345	22,50 €
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