

Industrial Electronic Autocollimation Theodolite Specifications

General:

Industrial Precision Theodolite with built-in autocollimation eyepiece, panfocal telescope and industrial reticle, double sided peep sight, colour LCD display, keyboard in one face, laser plummet, motorized H_z and V drive, supplied in transportation case with printed user manuals, soft copy on the manuals in CD/DVD, producer inspection certificate (angle accuracy) etc.

Angular measurement:

Standard deviation as specified by ISO 17123-3 : 1σ 0.5", H_z 0.5", V

Units of measurement: 360° sexagesimal

Display resolution for angle and level : 0.1"

Automatic reference to the horizontal:

2-axis liquid compensator, Working range : longitudinal/lateral 4'

Setting accuracy $\leq 0.5''$

Automatic corrections:

Line of sight error, tilting axis error, circle eccentricity, compensator index error, vertical index error, standing axis tilt

Display:

Colour graphics capable LCD, touch screen

Motor and fine drives:

Fine drives: Coarse/fine, infinite, slip coupling, positioning accuracy 0.7", maximum speed of rotation 45 °/s

Motor : direct drive

Power supply:

Plug-in rechargeable internal battery pack / external power source

Telescope:

Telescope type : Pan-focal alignment telescope

Image: erect

Objective aperture : 52mm

Clear Objective diameter : 40mm

Field of vision diameter at 100m : 2.08 m, non-linear

Magnification at 100m : 41x

Reticle : compatible to laser

Shortest target range: 0.61 m from telescope tilting axis

Focusing: Coarse and fine

Vertical angle display : Selectable zenith / elevation

Optical sighting tool (diopter) : on either side of the telescope

Range of inclination : -55° to +47°

Autocollimation : Built-in autocollimation with plug-in lamp, laser auto-collimation with diode laser eye-piece attachment

Tribrach:

Without optical plummet

Torsional stiffness : < 1"

Tripod:

Heavy duty wooden tripod

Torsional stiffness : < 1"

Accessories to include producer inspection certificate M (angle), 2 Nos internal batteries, battery charger, plug in autocollimation lamp, Diode Laser Autocollimation Attachment Eyepiece with intensity regulator and interconnecting cables, counterweight for laser attachment, external battery, transportation container, user manuals, high stability professional wooden tripod, high stability professional tribrach etc.

Commissioning : To be commissioned at IISU by the supplier.

Warranty : Comprehensive, one year after commissioning.