



2022 Series Alignment Telescopes

Horizontal & vertical micrometers, English units

The **2022** is the flagship instrument in our line of alignment telescopes. It is designed specifically to make measurements of deviations from a reference line, and secondarily, to provide an extremely straight optical reference line for any number of alignment applications. It has two built-in optical micrometers which measure at right angles to each other. They allow measurement of lateral shifts perpendicularly from the line of sight, in both the horizontal and vertical directions. The 2022 has a built-in autoreflection target on its objective lens and an autocollimation illumination unit.



The model **2022-02** is identical to the 2022 with the exception of having a 220VAC transformer in place of the 110VAC transformer, which is used to power the autocollimation illumination unit.

See also similar instruments 2024 (metric) and 2030 (brightline reticle system).

Specifications

Magnification: Varies automatically from 4x at zero focus to 46x at infinity.

Focusing range: Zero to infinity.

Resolving power: 3.4 seconds of arc (according to NIST test procedure).

Straightness of line of sight: + 0.002" (0 to 50'); + 0.004" (50' to 100'); 0.5 arcseconds beyond 100'

Field of view: 37 minutes at infinity, 42 mm at zero focus.

Effective aperture: 42 mm.

Optics: Fully coated optics used throughout.

Reticle: All-purpose, double glass, dustproof; cross-pattern with single lines top and right, paired lines bottom and left.

Eyepiece: Fully erect image; diopter scale. Right-angle eyepiece and complete projection accessories available.



2022 Series Alignment Telescopes

Specifications (continued)

Optical Micrometer:

- Built-in horizontal and vertical optical micrometers.
- Displacement: ± 0.050 ", direct reading to 0.001".
- Accuracy: ± 0.0002 " over full range.
- Scale graduations are red and black to indicate direction of displacement.

Focusing knob: Drum graduated to show focusing distance in feet.

Telescope barrel: Made of through hardened stabilized stainless steel.

Barrel diameter: 2.2498" (+0" -0.0003")
Meets A.I.A. specifications.

Barrel length: 9 3/6"

Overall length: 17 3/4"

Weight: Approx. 11 1/2 lbs.

Accessories

- 2230 Right Angle Eyepiece
- 2240 Combination Auto-Collimation, Projection, Right Angle eyepiece
- 2302 Angle reading attachment
- 2410 Optical Square
- 2412 Double Sphere Optical Square
- 3205 Cross Level
- 3220 Coincidence Striding Level