

Field Ranger 3.5"

#82010 Specification Sheet

Field Ranger 3.5" Telescope

The Field Ranger 3.5 is based on the acclaimed Questar Field Model design. The combination of unsurpassed optics with a simple and rugged design contributes to making it the ideal high-



magnification field surveillance lens. The Field Ranger 3.5 is extremely light, compact and well balanced. Its configuration makes it perfect for use with eyepieces, video, night vision, and digital equipment.

Performance:

Working Range: 6M (20ft) to infinity
Optical Resolution: 1.0 arc second
Clear Aperture: 89 mm (3.5 inches)

Effective focal Length (EFL) 1175 mm video/1475 mm with Image Erector

F-number: f/13.2 @ 1175 mm EFL

Spectral Response: 0.35 - 1.5 micron (other on request)

Optical:

Design Type: Maksutov Cassegrain Catadioptric

Corrector: BK7/MgFl₂ 89 mm CA (3.5 inches) diameter

Primary Mirror: Pyrex substrate, aluminum coated, SiO overcoat, 96 mm (3.78 inches) diameter Secondary Mirror: Aluminum coating on corrector, SiO overcoat, 29 mm (1.14 inches) diameter

Baffling: Wire helix in central tube, anti-reflective black painted

Mechanical:

Barrel: Aluminum, with press fit corrector cell

Rear Closure Plate: Aluminum; machined

Central Tube: Centerless ground stainless steel; threaded into rear closure plate

Mirror mount/focusing tube: Stainless steel sliding tube matched to central tube, integrated with mirror

mounting thimble

Focus Mechanism: 24 pitch ground stainless steel focus rod: Direct acting on mirror thimble, spring

loaded

Focus Control: 13 mm (1/2 inch) diameter straight knurled aluminum knob, position

may be rotated around barrel to suit operator

Finish: Aluminum parts: anodized; Exterior surfaces: Polane T polyurethane;

Color: sand (white, black, camoflauge are optional);

Hardware and fasteners: stainless steel

Mounting

Mounting: Tripod mount with 1/4" – 20 & 3/8" – 16 Female threads

Length with C Mount:26.3 cm (10.35 inches)Length with Image Erector and 16 mm Eyepiece30.6 cm (12.05 inches)Maximum Height:14.0 cm (5.53 inches)Maximum Diameter:10.8 cm (4.25 inches)

Case (outside) – ABS plastic:

 Length
 47 cm (18.5 inches)

 Depth
 37 cm (14.6 inches)

 Height
 14.5 cm (5.7 inches)

Weight:

Bare Lens with C mount 1.18 kg (2.6 lbs.) Lens with Image Erector and Eyepiece 1.48 kg (3.25 lbs.) Standard package complete, In case 4.9 kg (10.75 lbs.) Eyepiece Magnifications:

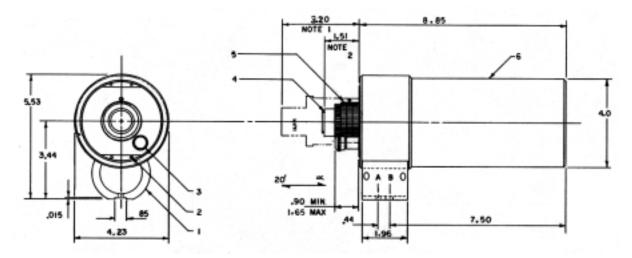
(1 1/4 type or Threaded)

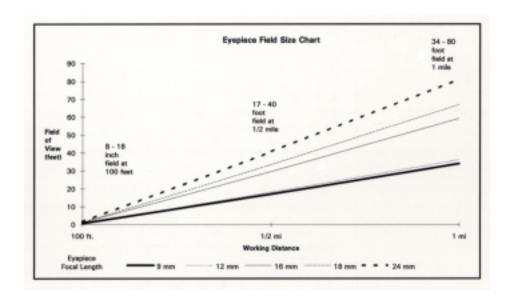
8 mm Brandon 184 X 12 mm Brandon 123 X 16 mm Brandon 92 X

24 mm Brandon 61 X

32 mm Brandon 46 X

All magnifications calculated with Image Erector in place. Refer to Questar price lists for individual components or option packages to complement use. 2" type Eyepieces can be used, but will not adapt to an Image Erector.





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