

## 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/MgF <sub>2</sub> 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, camouflage 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 Eyepiece	30.6 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)

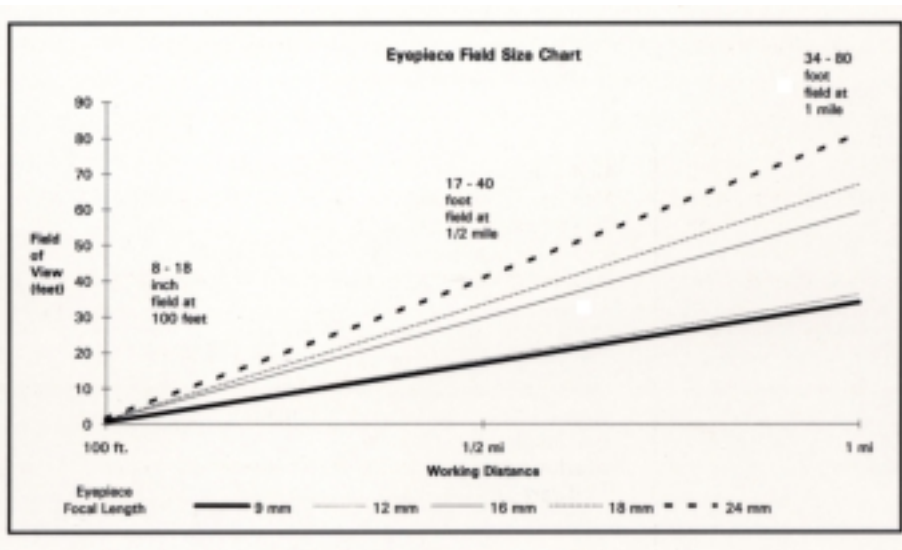
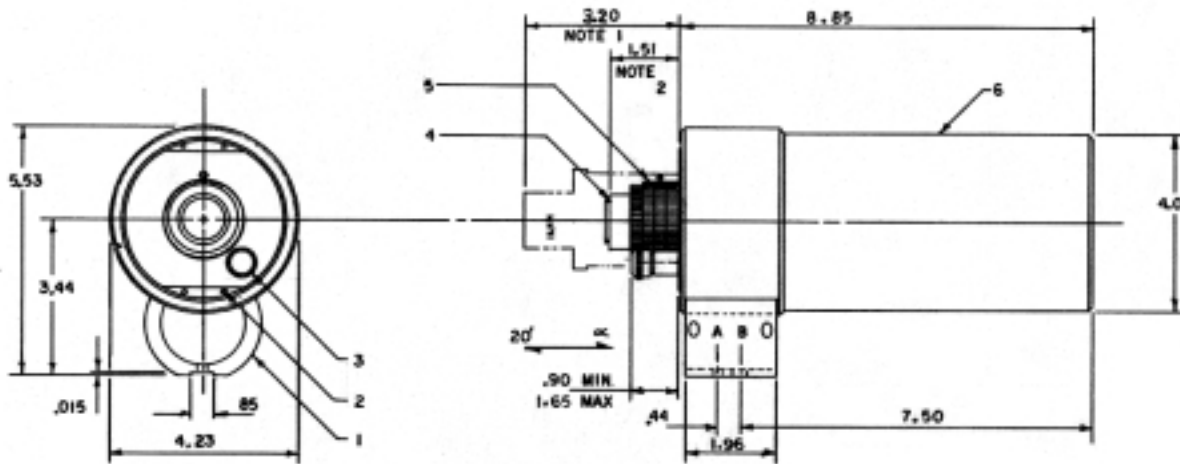
Eyepiece Magnifications:  
(1 1/4 type or Threaded)

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

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.)

*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.*



**Questar Corporation**

6204 Ingham Road, New Hope, PA 18938 USA

Phone: 215-862-5277 or 800-247-9607 Fax: 215-862-0512

Email: [Questar@QuestarCorporation.com](mailto:Questar@QuestarCorporation.com) Web: [www.QuestarCorporation.com](http://www.QuestarCorporation.com)