Questar Classic 7"

*Telescope*  
(#20102)

Questar's commitment to quality, on which it has built its worldwide reputation, is immediately apparent in the superb resolution and mechanical precision of the Questar Seven. Those who want more aperture than the Questar 3.5 provides will marvel at the increased power and quadrupled light grasp available with its larger offspring. The Seven is a fully mounted astronomical telescope that is completely portable. You can use it on a table with its own polar equatorial support, or with Questar's Folding Pier.

The Questar Classic Seven Barrel Assembly includes black anodized and purple skinned precision machined 2540mm EFL f/14 tube assembly, lens cap, 16mm (159-318x) and 24mm (106-212x) eyepieces, Control Box multi port selector, with built in finder and axial photographic port, basic camera coupling set, thread on dewcap and carrying case. Weight of barrel assembly 22 lbs, in carrying case 42 lbs.

**TYPE:** Maksutov Cassegrain Catadioptric  
**CLEAR APERTURE:** 7 inches, 178mm  
**FOCAL LENGTH:** Basic visual, 100 inches, 2540mm, Camera close, 112 inches, 2800mm  
**PHOTOGRAPHIC FIELD OF VIEW:** 1°15'  
**FINDER LENS:** 23mm dia, 184mm FL, 7x and 14x  
**ERECTING SYSTEM:** Star Diagonal type, 90°  
**EYEPIECES:** 24mm Brandon, 50° Ap Field, 16mm 4 lens Brandon, 50° Ap Field  
**AMPLIFYING OR BARLOW LENS:** minus 66.06mm FL.  
**CORRECTOR LENS:** BSC2, passes UV to 3300A°, IR to 1.5 microns, parfocal  
**MIRROR:** F2, low expansion Zerodur (for greatest thermal stability), or Pyrex®, AlSiO coated, 7.600" dia.  
**BARREL:** Special extruded and stress-relieved 2024-T4 aluminum, machined full length O.D. and I.D.  
**LENS CELL:** Aluminum 2024-T4, black anodized  
**REAR CLOSURE PLATE:** Aluminum 2024-T4, black anodized  
**MAIN TUBE MOUNTING PLATE:** Aluminum 2024-T4, black anodized  
**FOCUSING MECHANISM:** Mirror Thimble, precision machined and ground stainless steel, rides on bearing, linear ball type, over a fixed, hardened and ground stainless steel light baffle tube. Conical stainless steel spring-loaded. Focus rod stainless steel ground shaft with precision ground ¼-32 threads.  
**CONTROL BOX:** Aluminum construction, special aluminum paint, baked, clear laquered and again baked.  
**KNOBS:** Aluminum 2024-T4, turned on turret lathe. Stainless steel shafts and levers.  
**DIMENSIONS:** Maximum length with control box 23.2”  
Maximum height 5.06”  
Maximum diameter 8.03”  
Barrel Assembly weight 26 lbs.  
Case Weight 32 lbs.
Typical Questar Seven Modulation Transfer Function (MTF) as obtained with a shearing interferometer and expressed as a function of the shear parameter, $S$. To express the MTF as a function of the spatial frequency, $R$, in lines per millimeter, the following relationship can be used:

$$R = \frac{SD}{2\lambda f}$$

where $S$ = shear parameter, $\lambda$ wavelength, $f$ = focal length, and $D$ = clear aperture.