

ASTRO-PHYSICS

# 180 F7 STARFIRE EDF APO REFRACTOR

*This instrument was requested by some of the world's most advanced amateurs who recognize the inherent advantages of a highly corrected, super-sharp refractive optical system for widefield high-resolution astrophotography. We will produce a limited number of these refractors.*

- A 180mm refractor that is only 48" long is extraordinary
- Superb pinpoint images on either 35mm or 6x7cm emulsions
- 4" focuser and 4" field flattener for the ultimate in astrophotography
- Marvelous deep-sky and planetary views
- Oil-spaced design, multi-coated elements results in 97% light transmission
- Very contrasty images at any power

## SPECIFICATIONS

Color correction:	Less than 0.01% focus variation from 405nm to 706nm (r to h wavelengths).
Clear aperture:	180mm (7.1")
Focal length:	1260mm (49")
Resolution:	0.64 arc seconds
Coatings:	Multi-layer, overall transmission greater than 97% in peak visual wavelengths
Magnification range:	22x to 700x
Tube assembly:	White, 8" aluminum tube, baffled, flat black interior, engraved push-pull lens cell
Focuser type:	4.0" Astro-Physics rack & pinion focuser, 4.5" travel; 2.7", 2" and 1.25" adapters; 2.5" extension
Telescope length:	1219mm (48") w/ dewcap fully retracted
Weight with dewcap:	34 lbs. (15.4kg)
Carrying-case type:	Wood case with grey vinyl covering, foam-lined interior, removable wheels
Case outside dimensions:	52"x13"x13" (132cmx33cmx33cm)
Weight of case:	25 lbs. (11.4kg)

35mm prime-focus field:	1.1 x 1.5 degrees @ f7
35mm telecompressor field:	1.5 x 2.1 degrees @ f5.2
35mm field with 2x Barlow:	0.5 x 0.8 degrees @ f14
6x 7cm prime focus field:	2.7 x 3.2 degrees @ f7

Specifications subject to change without notice.

## FEATURES OF THE OPTICS

- Very high corrections of spherical and chromatic aberrations
- Visual and photographic focus is identical, eliminating the need for light-absorbing filters
- Well corrected into the infrared so that filters are not needed for CCD photography
- Clear, colorfree glass types result in brighter, more contrasty images
- Stunning lunar/planetary and deep-sky views
- Ideal for 35mm and medium-format deep-sky astrophotography
- High-resolution optics are a good match for fine-grained Technical Pan emulsions.

## FEATURES OF THE TUBE ASSEMBLY

- Felt-lined dewcap slides over cell for storage
- Fully baffled tube and focuser assures highest contrast
- 2" and 1.25" adapters with brass locking ring, 2.5" extension
- Beautifully machined parts and expertly finished in hard polyurethane paint or black anodized
- Aluminum lens cover to protect against dust
- Sturdy foam-padded carrying case with removable wheels