

# **TEC APO140 FIELD FLATTENER TECHNICAL SPECIFICATIONS**

Back focus distance	85mm / from flange to the focal plane		
Max diameter	112 mm		
Length	104 mm		
Weight	1.2 lb		
Lens coatings:	Broad band anti-reflection coating (BBAR)		
Price (2004)	\$600		
Includes :	FF assembly with two covers.		

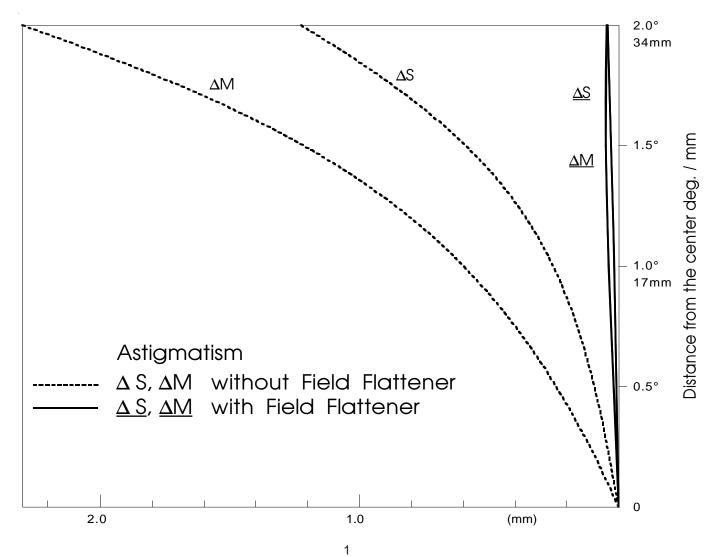
### **OPTICAL DESIGN**

TEC Field Flattener (FF) has been designed for correcting field curvature and off-axis astigmatism of the APO140. FF has a wide-spaced two lens design that corrects abberations most efficiently.

Combination of APO140 with FF gives highly corrected field with round spot under15mk in diameter over entire field 6x7cm (Pentax 67).

Distortion on the edge of the field is less than 0.5%.

Distance from the center	0°	1.4°	2.0°
Spot size dia. w/o FF (mk)	9	145	320
Spot size dia. with FF (mk)	9	15	14

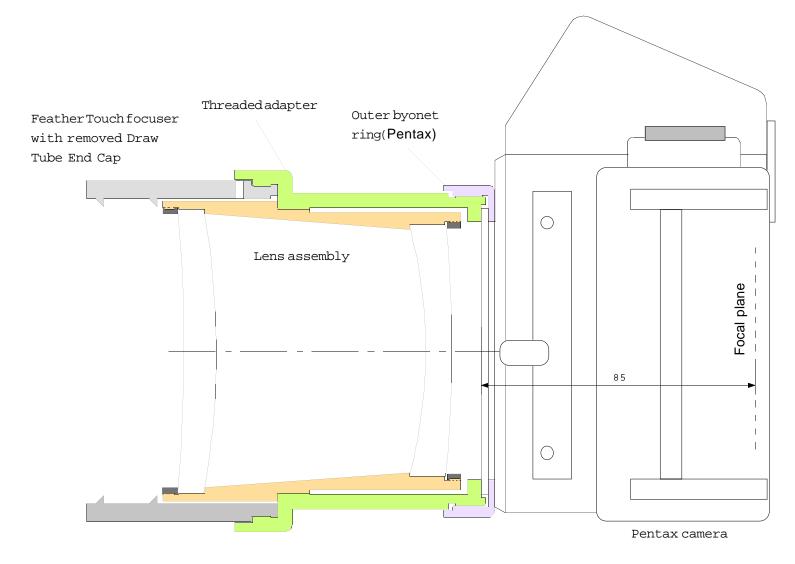


### **OVERVIEW**

Field Flattener (FF) for APO140 contains thee major components:

- 1. Threaded adapter with mating thread to the thread of Starlight focuser draw tube end
- 2. Lens assembly permanently installed in to the threaded adapter
- 3. Pentax outer bayonet ring

The camera end of TEC FF has the same dimensions and design as Astro-Physics's Field flatteners - this lets you use a wide variety of AP photographic assessories.



The distance from FF's base plane to the focal plane is 85mm, holding this distance is more critical for Pentax 6x7 and 35 mm cameras and less critical for CCD cameras with small chip size.

# INSTALLATION

To install the Field Flattener, the Draw Tube End Cap (see 6.12 in the APO140 manual) has to



be removed. To do so first loosen all three Draw Tube End Cap Locking Screws (6.13) with 1/16" hex key and then unscrew the End Cap. Thread the Field Flattener onto the focuser drawtube to the end of thread, but do not overtighten it.

Pentax 6x7 camera attaches to the FF directly.

35 mm camera requires a special adapter - Astro-Physics part number: 67RT - 35 mm camera adapter with T-ring for your camera. To install this adapter remove the bayonet ring and place the adapter in to the FF end and tread the bayonet back, than install your camera.

CCD cameras installation requires one of the AP's CCD adapters (A1261, A1260, A1262) and 2" Adapter (ADA2003, ADA200.

Shown below on the right: FF with AP 67RT 35mm camera adapter installed; on the left - FF ready for Pentax 6x7 camera installation.





#### CONTACT INFORMATION

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