

**Keep your beloved telescope transform your star images.
A new-generation reducer compatible with multiple
models is here.**



Takahashi will release three new universal reducers—the Multi Reducer 0.85×-S, Multi Reducer 0.85×-M, and Multi Reducer 0.85×-L—on September 26, 2025. These new models are designed to be widely compatible with both current and previous generations of Takahashi's compact fluorite telescopes.

●Make your night sky sharper than ever.The evolved Multi Reducer has arrived.

This product is a high-performance 4-element, 3-group reducer designed for optical tubes with focal lengths between 350 mm and 600 mm that are free from coma aberration. By maintaining a reduction factor of 0.85 × , it effectively corrects various aberrations while ensuring ample illumination across the field. The result is crisp, sharp star images throughout the entire image circle.

The lineup consists of three models—Multi Reducer 0.85 × -S, Multi Reducer 0.85 × -M, and Multi Reducer 0.85 × -L—allowing you to choose the optimal model based on your telescope's focal length. (Please refer to the system chart and compatibility list for details.)

These reducers are primarily compatible with FC/FS series and FCT-65D telescopes with apertures of 50 mm to 76 mm. They deliver outstanding sharpness and fully maximize the performance of both current and earlier models. For telescopes compatible with fluorite reducers, replacing the existing **FC/FS Multi Flattener 1.04 ×** or **FU Reducer** with this new model allows you to select from three different focal lengths.

With the introduction of this product, users can now choose the ideal conversion lens according to their imaging style and target object—greatly expanding the creative possibilities of their existing optical tubes.

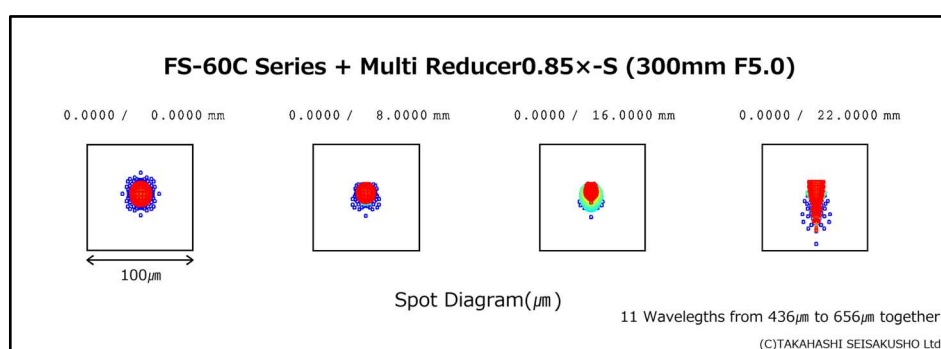
● **Multi Reducer 0.85×-S TKA00580-S**



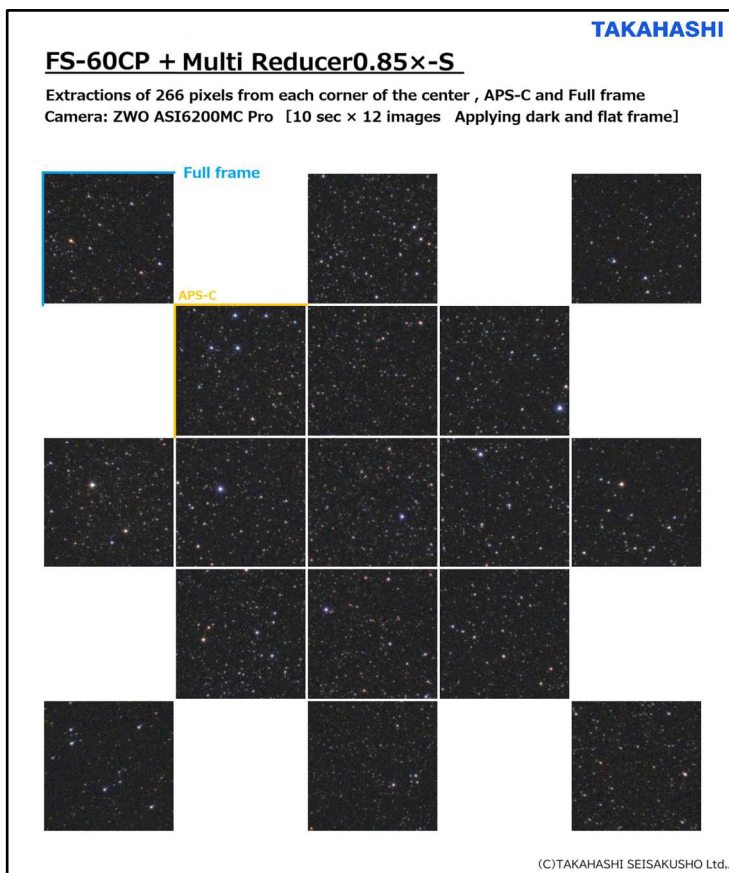
The **Multi Reducer 0.85 × -S** comes with a CA ring designed for compatibility with the **FS-60C series** (*see note below*). When attached, it shortens the focal length from 355 mm to 300 mm (F5.9 → F5.0), significantly improving off-axis image quality and delivering sharp, uniform images across the field.

With a wide **φ 44 mm image circle**, it is the **first full-frame-compatible reducer** for a model using a compact focuser. The 300 mm focal length is ideal for capturing large nebulae and star clusters, offering flexibility for a wide variety of astrophotographic subjects.

Note: When using the discontinued FS-60C, the reducer cannot be used in combination with the Camera Angle Adjuster S due to focus position constraints. Please refer to the system chart before use.



[100% Crop Image] FS-60CP + Multi Reducer 0.85 × -S



[Specifications] Multi Reducer 0.85 × -S

Item	Multi Reducer 0.85×-S
Optical Design	3 groups, 4 elements
Compatible Models	FS-60CB / FS-60CBX / FS-60CP / FS-60Q / FS-60C (discontinued)
Outer Diameter × Length	Φ60×55.8mm
Telescope-Side Thread	M55.9 P=0.75
Camera-Side Thread (*)**	M52 P=0.75
Effective Focal Length / F-Ratio	300mm (F5.0)
Image Circle	Φ44mm
Weight	0 Approx..2kg
Production Code	TKA000580S

Specification refers to the standard of the dedicated CA ring supplied with the product.

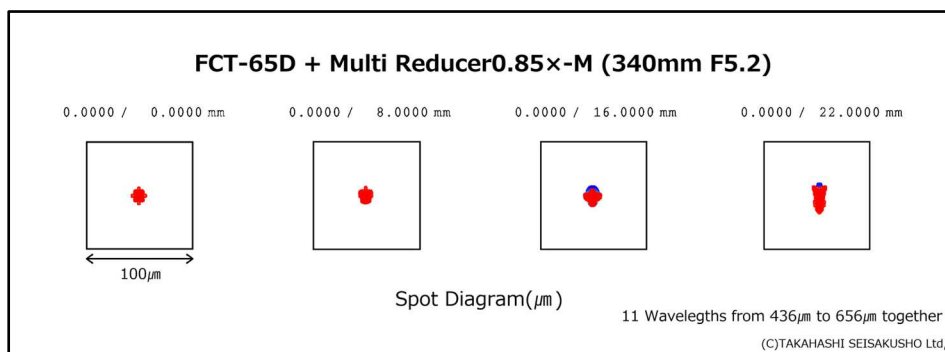
●Multi Reducer **0.85×-M** TKA00580-M



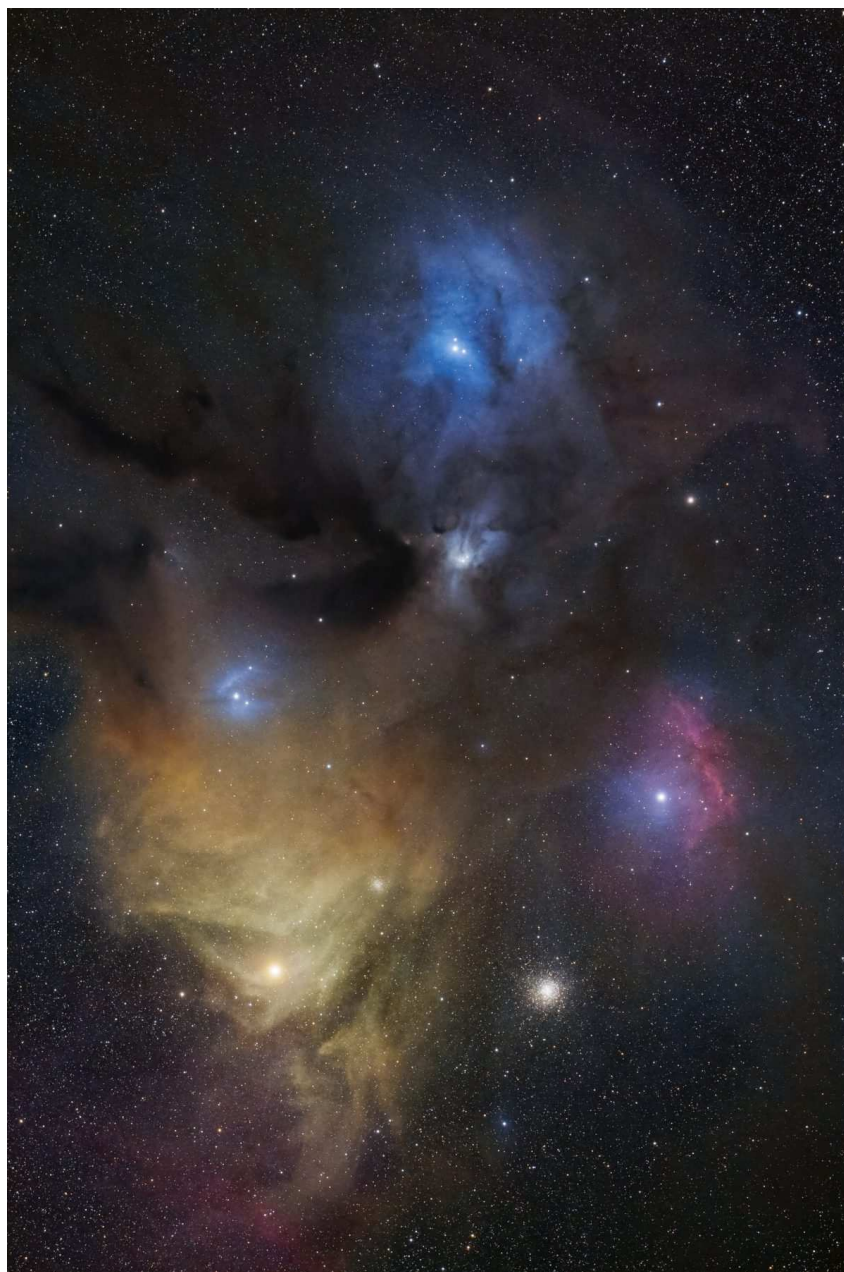
The **Multi Reducer 0.85 × -M** comes with a dedicated CA ring designed for compatibility with the **FCT-65D** and **FC-50** (discontinued) telescopes.

When used with the **FCT-65D**, it shortens the focal length from **400 mm** to **340 mm (F6.2 → F5.2)**, delivering extremely sharp images across the entire image circle. This focal length falls between that of the **65D FU Reducer 0.65 ×** and the **FC/FS Multi Flattener 1.04 ×**, allowing users to choose the optimal setup based on their imaging targets.

When attached to the **FC-50**, the image quality is significantly improved compared with the original reducer designed for that model, providing bright, sharp images even at the edges of the field.



[Sample Image] FCT-65D + Multi Reducer 0.85 × -M — Antares Region



〈Target〉

Antares Region

〈Equipment〉

Optical System: FCT-65D + Multi Reducer 0.85 ×

Camera: ZWO ASI6200MC Pro

No filter used

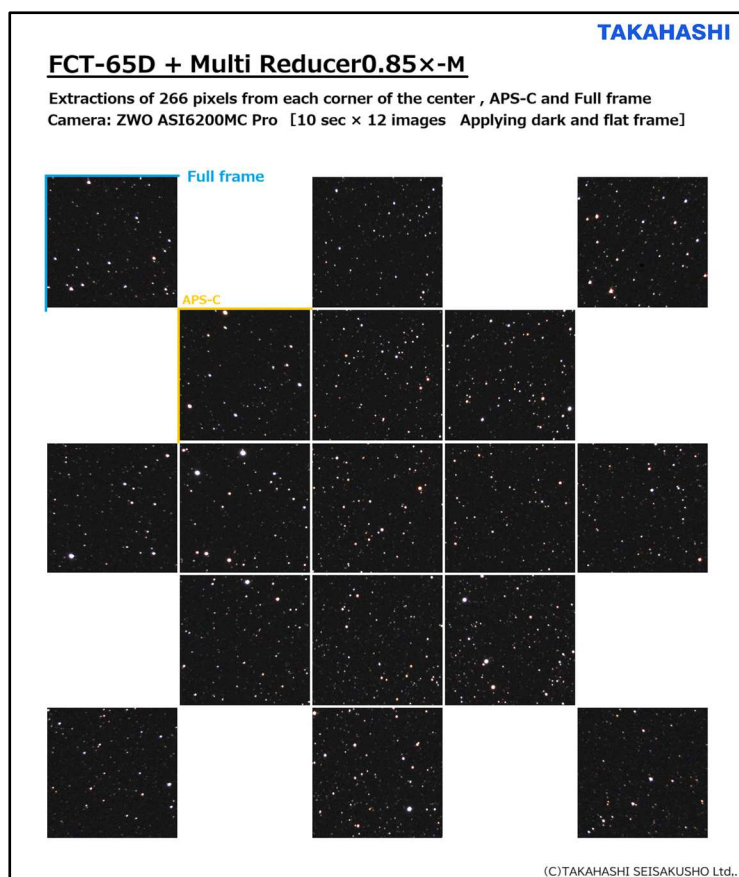
〈Imaging Details〉

Gain: 100

Exposure: 60 sec × 60 frames (total exposure 60 min)

Sensor Temperature: -10°C

[100% Crop Image] FS-60CP + Multi Reducer 0.85×-M



[Specifications] Multi Reducer 0.85×-M

Item	Multi Reducer 0.85×-M
Optical Design	3 groups, 4 elements
Compatible Models	FCT-65D / FC-50 (discontinued)
Outer Diameter × Length	Φ60×54.7mm
Telescope-Side Thread	M55.9 P=0.75
Camera-Side Thread (*)**	M52 P=0.75
Effective Focal Length / F-Ratio	FCT-65D : 340mm (F5.2) FC-50 : 340mm (F6.8)
Image Circle	Φ44mm
Weight	Approx..0.2kg
Production Code	TKA000580M

Specification refers to the standard of the dedicated CA ring supplied with the product.

●Multi Reducer 0.85×-L TKA00580-L

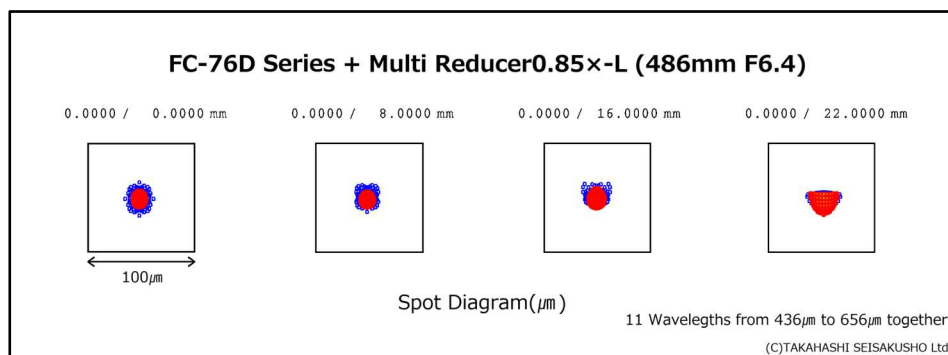


The **Multi Reducer 0.85×-L** comes with a CA ring designed for compatibility with the **FC-76D series** and **FC-60**, among others.

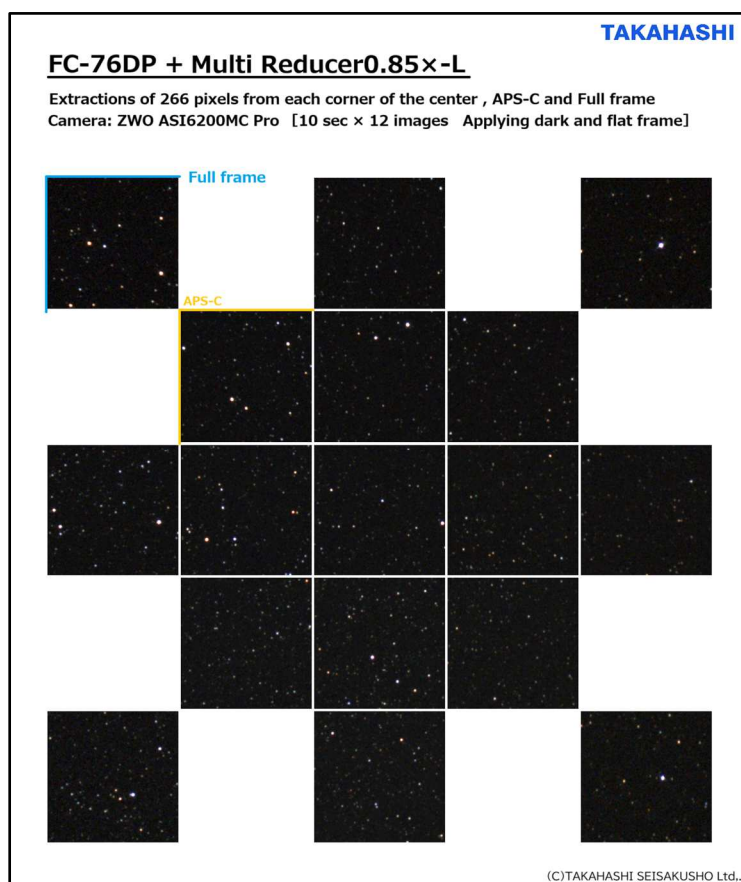
When used with the **FC-76D**, it shortens the focal length from **570 mm** to **486 mm (F7.5 → F6.4)**. The product offers a **ϕ 44 mm image circle**, which is significantly larger than that of the previous 76D reducer (36 mm), making it suitable for **full-frame camera** imaging.

It is also highly compatible with older models such as the **FC-60** and **FC-65**. Although slight vignetting may occur due to drawtube diameter, the new reducer dramatically improves aberration correction compared with the original reducers, resulting in noticeably sharper star images.

Please note that required accessories may vary depending on the telescope model. Refer to the system chart for detailed configuration information.



[100% Crop Image] FS-60CP + Multi Reducer 0.85×-L



[Specifications] Multi Reducer 0.85×-L

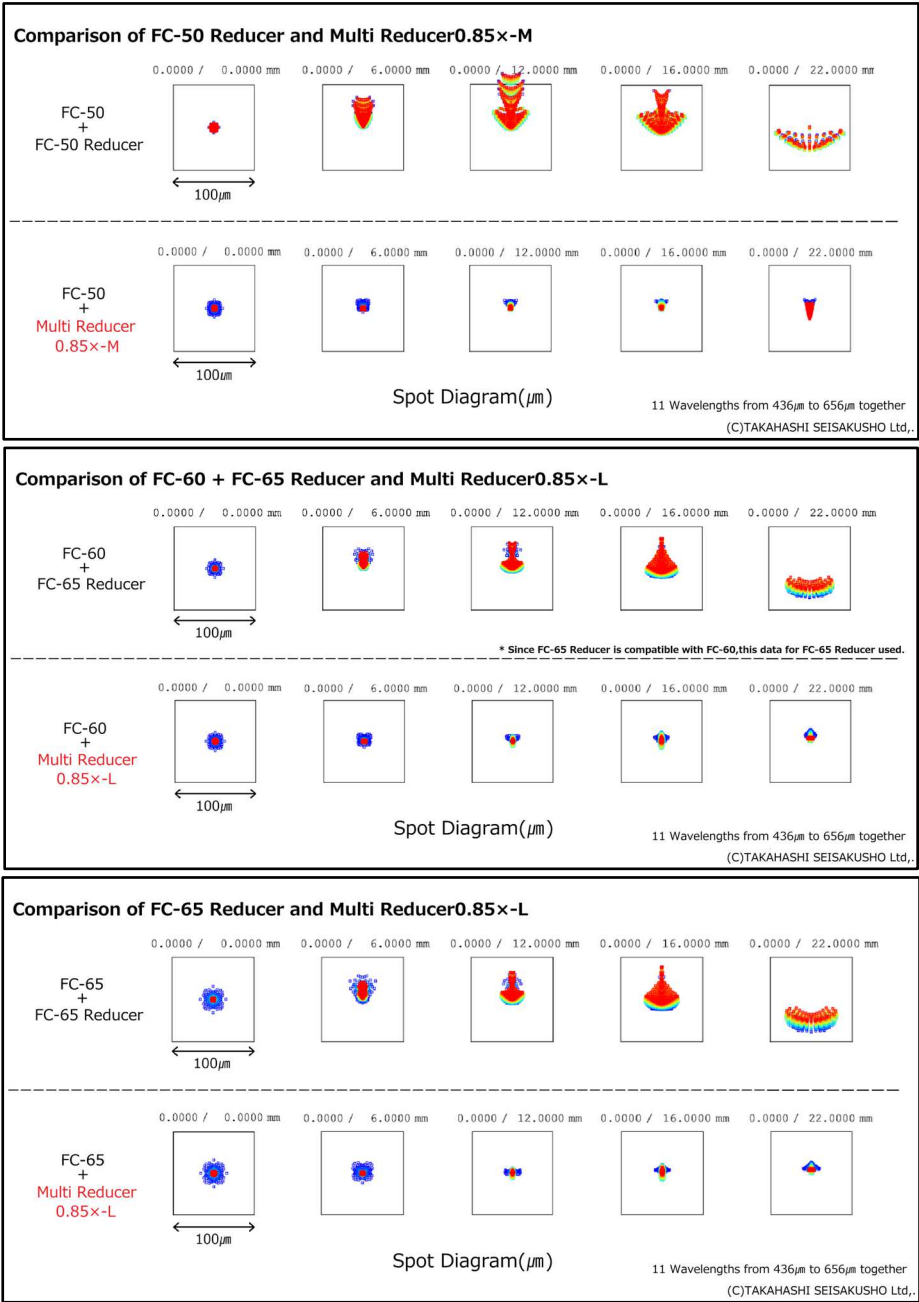
Item	Multi Reducer 0.85×-L
Optical Design	3 groups, 4 elements
Compatible Models	FC-76DCU/FC-76DS/FC-76DP FC-76DC (Discontinued) FC-60 (Discontinued) /FC-65 (Discontinued) FC-76 (Discontinued)
Outer Diameter × Length	Φ60×54.3mm
Telescope-Side Thread	M55.9 P=0.75
Camera-Side Thread (*)**	M52 P=0.75
Effective Focal Length / F-Ratio	FC-76D 各機種 : 486mm (F6.4) FC-60 : 425mm (F7.0) / FC-65 : 425mm (F6.5) FC-76 : 510mm (F6.7)
Image Circle	Φ44mm
Weight	Approx..0. 2kg

Production Code	TKA000580L
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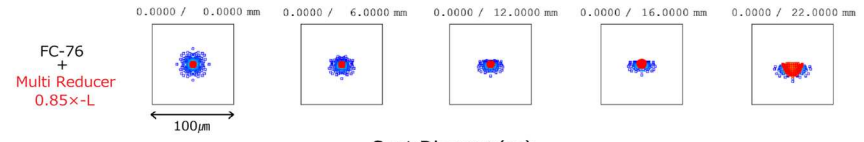
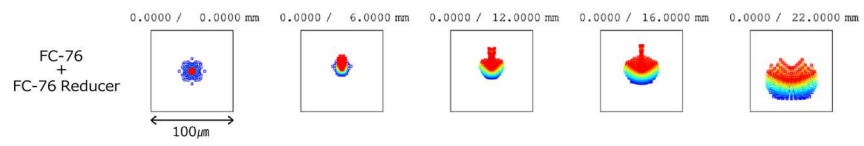
Specification refers to the standard of the dedicated CA ring supplied with the product.

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●Spot Diagram Comparison — Older Models + Multi Reducer 0.85 ×



Comparison of FC-76 Reducer and Multi Reducer0.85×-L



Spot Diagram(μm)

11 Wavelengths from 436μm to 656μm together
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