

F-Theta Lens

F-theta or $F\theta$ scanning are essential for precision laser displays, marking, engraving, drilling, and welding as well as applications in LIDAR, microscopy, and tomography. Unlike conventional spherical lenses, they maintain a consistent focus and spot size on flat surfaces without the errors caused by traditional flat-field lenses.



All our F-theta lenses are made from K9 borosilicate crown glass and employ M85×1 threading.

The following specifications are for lasers with a 1064 nm wavelength:

Focal Length		Scan			Beam Dia.	Spot Size	Working Distance
Effective	Back	Field	Length	Angle			
100 mm	123.5 mm	70×70 mm	99 mm	±28°	12 mm	18 μm	115.5 mm
160 mm	169.5 mm	110×110 mm	158 mm	±28°	12 mm	28 μm	160.5 mm
210 mm	233 mm	150×150 mm	212 mm	±28°	12 mm	35 μm	229 mm
254 mm	272 mm	175×175 mm	247.5 mm	±28°	12 mm	40 μm	268 mm
290 mm	302.7 mm	200×200 mm	283 mm	±28°	12 mm	43 μm	299 mm
430 mm	445 mm	300×300 mm	424 mm	±28°	12 mm	50 μm	441 mm

Maintenance

Periodically clean the lens of any dust or debris with a lens paper wetted with an oil-based lens cleaning solution. Ensure that all oil has been wiped off before using the laser.

Contact Us

Thank you for choosing our products! If you have any questions or comments, contact us at help@cs-supportpro.com and we'll resolve your issue ASAP!