

[See all 14 Products in Family](#)

# Sill Optics 163mm FL, 90 x 90mm Scan Area, 1030-1090nm F-Theta Scanning Lens, S4LFT3162-328

See More by [Sill Optics](#)



Stock #70-150 [CONTACT US](#)

⊖ 1 ⊕ C\$9,436<sup>00</sup>

**ADD TO CART**

#### Volume Pricing

Qty 1-4	C\$9,436.00 each
Qty 5+	C\$8,498.00 each
Need More?	<a href="#">Request Quote</a>

#### Product Downloads

#### General

S4LFT3162-328 **Model Number:**  
F-Theta Lens **Type:**

#### Physical & Mechanical Properties

130.00 **Maximum Diameter (mm):**

282.3	Flange Distance (mm):
15.00	Input Beam Diameter, 1/e <sup>2</sup> (mm):
102.00	Maximum Length (mm):
1.80	Weight (kg):

## Optical Properties

163.00	Focal Length FL (mm):
±22.90	Scan Angle (°):
90.0 x 90.0	Scan Field (mm):
5.6	Telecentricity (°):
>97	Transmission (%):
201.47	Working Distance (mm):
1064	Design Wavelength DWL (nm):
1030 - 1090	Wavelength Range (nm):
1030nm - 1090nm R < 0.20% - low absorption	Coating Specification:
16.09	Focus Size Diameter, 1/e <sup>2</sup> (μm):
5.0 J/cm <sup>2</sup> per 1ns pulse at 50Hz	Damage Threshold, Pulsed:
5.0 MW/cm <sup>2</sup>	Damage Threshold, CW:

## Threading & Mounting

M85 x 1.0	Mounting Threads:
-----------	-------------------

## Regulatory Compliance

<a href="#">View</a>	Certificate of Conformance:
----------------------	-----------------------------

## Product Details

- Ideal for High-Precision Material Processing and Laser Scanning Applications
- Large Scan Fields Up to 410mm x 410mm
- High Damage Thresholds and Low Telecentricity Errors
- [Galvanometers](#), [Beam Expanders](#), and [Laser Sources](#) Also Available

Sill Optics F-Theta Lenses are high quality lenses specifically designed for laser material processing applications for industrial mechanical engineering. These F-Theta Lenses offer a wide range of focal lengths up to 650mm, and large scan fields up to 410mm (X) x 410mm (Y). Optimized for Nd:YAG fundamental, second, or third harmonic laser wavelengths, these lenses are available in design wavelengths of 355nm, 532nm, and 1064nm with common mounting threads for easy integration into galvo systems. Sill Optics F-Theta Lenses feature fused silica substrates and utilize a special low-absorption coating to minimize thermal effects and increase damage thresholds up to 5.0 J/cm<sup>2</sup> (1ns, 50Hz) for pulsed lasers and 5.0 MW/cm<sup>2</sup> for continuous wave (CW) lasers. These lenses are ideal for a range of material processing and medical applications such as laser cutting, welding, and drilling, confocal microscopy, and ophthalmology.