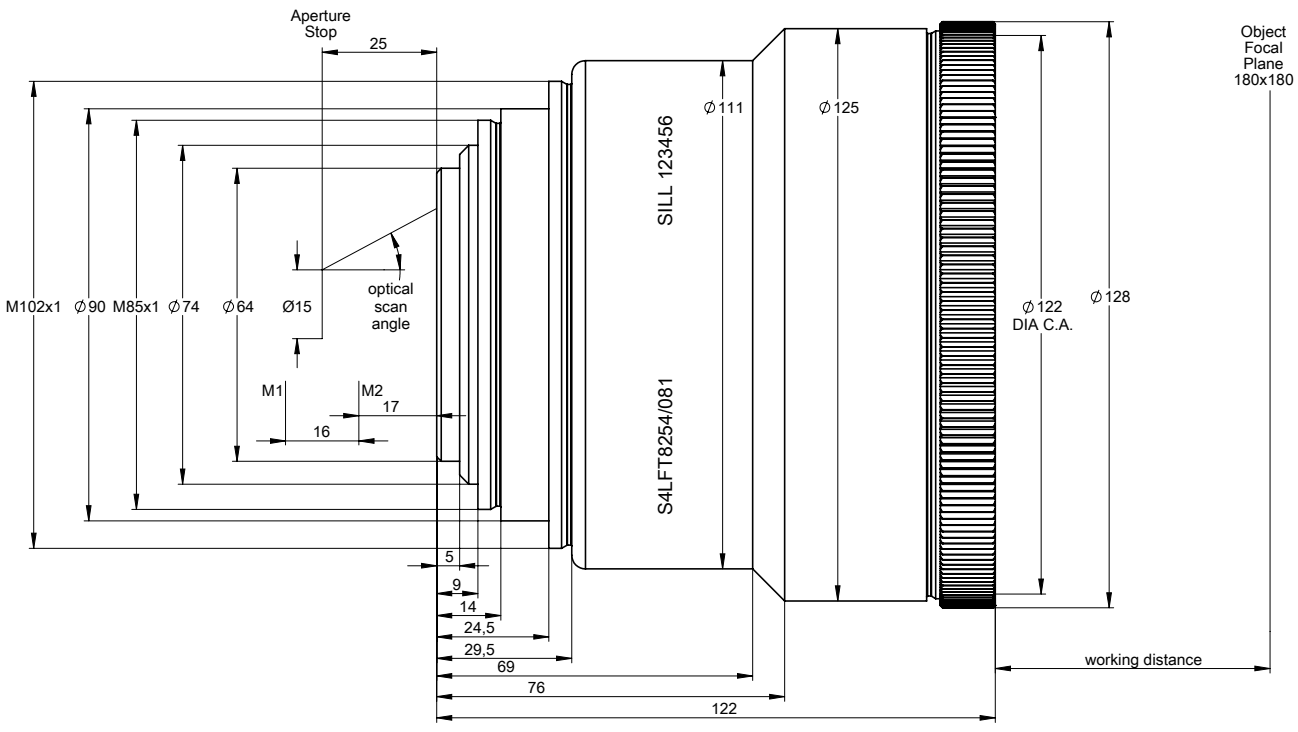
DATA SHEET

新特光电 Sintec Optronics

S4LFT8254/081

F-Theta
multi-spectral
532 + 1064 nm

outline drawing



DATA SHEET

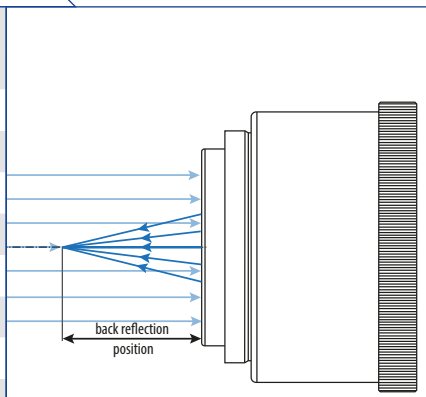
Sintec Optronics 新特光电

specifications

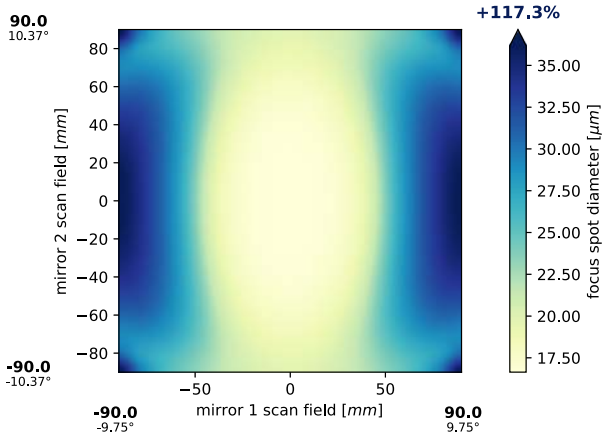
article number	S4LFT8254/081	
design wavelength [nm]	532	1064
effective focal length [mm]	254.0	253.9
max. entrance beam-Ø [mm]	15.0	
optical scan angle [±°]	28.2	28.2
scan length [mm] (1 mirror system)	254.6	
aperture stop distance [mm]	25.0	
working distance [mm]	211.6	211.4
scan area for a 2 mirror system with mirror distance from lens housing for mirror 2 / mirror 1	180 x 180 17.0 / 33.0	
max. telecentricity error [°]	19.7	19.6
lateral color shift [µm]		
chromatic focal shift [mm]		
total transmission [%]	> 94	
lens material	optical glass	
LIDT (coating)	2.5 J/cm² per 1ns pulse at 50Hz	
SP and USP usable	no	
weight [kg]	2.2	
cover glass	S4LPG0300/081	
absorption [ppm]	not specified	
cleanliness	not specified	

back reflection position

back reflection [mm]	
for 532 nm	for 1064 nm
0.44	0.60
1.23	1.08
12.46	10.46
21.52	20.70
24.41	25.46
35.34	33.71
57.79	56.92
59.63	57.30
60.75	58.77
0.00	0.00

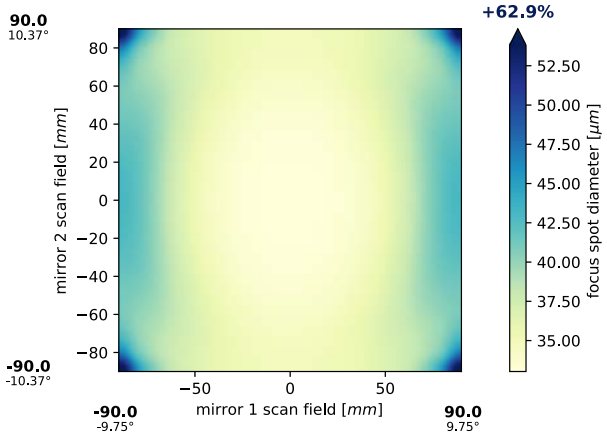


spot for 532 nm



spot diameter at 86.5 % level for a Gaussian beam ($M^2 = 1$)
with 15.0 mm diameter at $1/e^2$, clipped at 15.0 mm
field size and mirror distances as given above for a two mirror scan system

spot for 1064 nm



spot diameter at 86.5 % level for a Gaussian beam ($M^2 = 1$)
with 15.0 mm diameter at $1/e^2$, clipped at 15.0 mm
field size and mirror distances as given above for a two mirror scan system

notes

- The values given assume a vignetting of less than 1 %
- Effective focal length and working distance have tolerance of +/- 1.5 %
- Absorption tolerance +/- 25 %. Absorption may degrade over time, correct cleaning is able to reset to factory condition.