



SL1250P 4K Resolution Day/Night lens for 1/1.7" sensors

- ✓ Ultra high resolution for 4K cameras, up to 12.4 megapixel
- ✓ P-iris
- ✓ Locking screws for focus and zoom
- ✓ IR corrected for true Day/Night cameras
- ✓ Compact design to fit into domes as small as 4" mini-dome size
- ✓ Used for sensor sizes 1/2.5", 1/2.3", 1/2", 1/1.8", and up to 1/1.7" (Sony IMX178, Sony IMX226 for example)

SL1250P

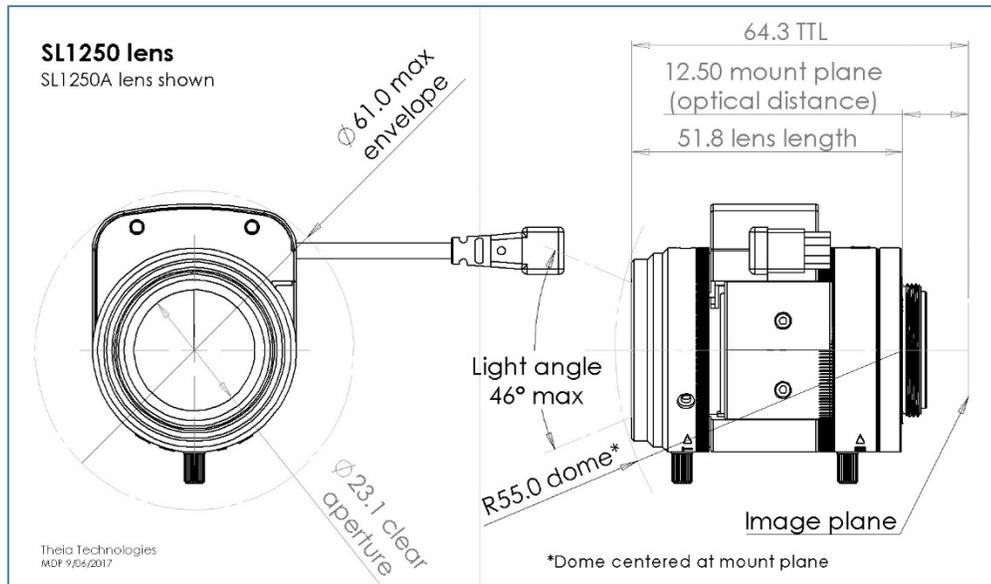
Focal length	12-50mm
Mount type	CS-mount
Iris type	P-iris
Image circle	Up to Ø9.4mm
Resolution	12.4 megapixel, 300lp/mm
F/#	F/1.8 @ 12mm - F/2.4 @ 50mm to close
IR Correction	435nm – 940nm (Day/Night)
Focus Range	2.0m - infinity
Lens length	< 64mm TTL
Back focal length	BFL 8.2mm (in air)
CRA	< 7°
Distortion	< 10% at 12mm, < 2% at 50mm
Relative illumination	>40%
Lens transmission	>80%
Weight	70g
Operating temperature	-20C to 60C (<70% humidity, non-condensing)
Storage temperature	-30C to 70C (<90% humidity, non-condensing)

Field of view for sensor sizes

Sensor size	1/1.7"	1/1.8"	1/1.8" 4K*	1/2"	1/2.3"	1/2.5"
Horizontal	36° - 8.6°	36° - 8.6°	35° - 8.5°	30° - 7.4°	30° - 7.2°	27° - 6.7°
Vertical	26° - 6.5°	23° - 5.8°	17° - 4.3°	23° - 5.6°	22° - 5.5°	20° - 5.0°
Diagonal	46° - 11°	44° - 10°	40° - 9.5°	39° - 9.2°	38° - 9°	34° - 8.3°

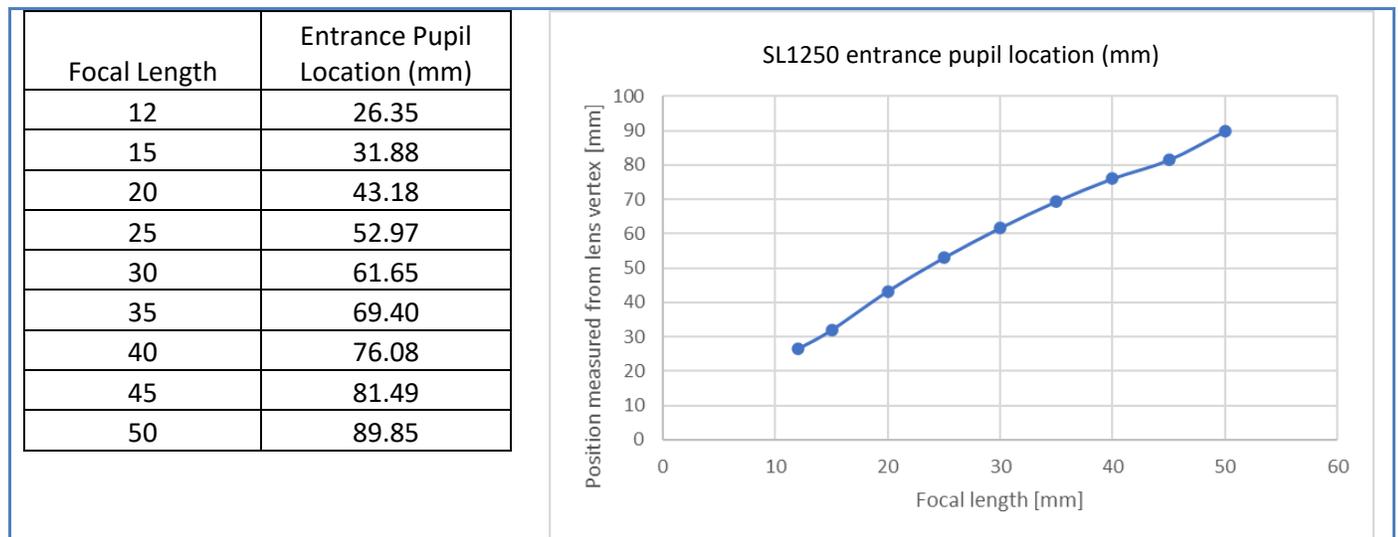
*4K format = 4000 x 2000 pixels

Lens drawing



Entrance pupil location

The entrance pupil location is measured from the vertex of the lens at the input side. It is located inside the lens.



P-iris motor specifications

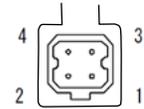
Drive	Stepper motor 2 phase bipolar drive
Operating voltage	4V (+/-1)
Number of steps	75 (open to closed)
Basic step angle	18°
Maximum response freq.	200pps
Coil resistance	30Ω

P-iris: open->close				
Step	A+	A-	B+	B-
0	H	L	H	L
1	L	H	H	L
2	L	H	L	H
3	H	L	L	H

Connector type 2 (CCTV)

Connector type	Housing: EYC 221
Cable length	300mm

Pin	Function
1	B+
2	A+
3	A-
4	B-



P-iris motor map

Step	Aperture Size [mm ²]	F/# (at FL=12mm)
1	95.0	1.84
5	90.8	1.88
10	82.1	1.98
15	72.8	2.10
20	63.4	2.25
25	54.0	2.43
30	44.9	2.67
35	36.0	2.98

Step	Aperture Size [mm ²]	F/# (at FL=12mm)
40	27.7	3.39
45	20.0	3.98
50	13.2	4.90
55	7.5	6.52
60	3.1	10.10
65	0.8	19.34
70	0.1	69.29
72	0.0	Closed
75	0.0	Closed

Alternate lens options

There are other options for motor configurations, iris types, and mount types. Please visit www.theiatech.com to learn more about our other lens options.

xx1250x xx -xx

TL: motorized
SL: non-motorized

A: autoiris
P: P-iris
M: manual iris

R3: motorized zoom, focus, iris
R4: motorized zoom, focus, iris, IRC
R5: motorized zoom, focus, iris, with limit switch for zoom, focus limits
R6: motorized zoom, focus, iris, IRC, with limit switch for zoom, focus limits

Blank or CS: CS mount
25: smooth Ø25mm mount

Production versions:
SL1250M (manual lens, manual iris, CS mount)
SL1250A (manual lens, DC autoiris, CS mount)
SL1250P (manual lens, P-iris, CS mount)
TL1250A-CS (fully motorized, DC autoiris lens)
TL1250P-CS (fully motorized, P-iris lens)

Other versions are available by special request and may be added to regular production

For more information contact

Theia Technologies
info@TheiaTech.com
www.TheiaTech.com
+1-503-570-3296

Revisions

Version	Change	Reason
240709	Changed to lens specific spec	
241112	Added P-iris motor specifications	