



Theia Telephoto Lenses for ITS/LPR/ANPR Applications

- ✓ High resolution for **HD, 5MP & 4K** cameras, up to 12.4 MP (300 lp/mm & 1.55 μ pixels)
- ✓ Available in DC **Autoiris, P-iris, and Manual iris** versions
- ✓ **Fully motorized "TL" versions** available with combinations of zoom, focus, iris motors
- ✓ Optional **MCR IQ™ Motor Control Board** also available for motorized lenses
- ✓ NIR bandpass and notch filters available on some models
- ✓ Excellent **NIR correction** (440 to 940nm) for **Day/Night** cameras with IR illuminators
- ✓ **Light weight & Compact design** to fit into domes as small as 4" mini-dome size
- ✓ **CS-mount** and smooth **D25 board mount** options
- ✓ Used for sensor sizes 1/3", 1/2.3", 1/2.5" and **up to 1/1.7"**



Lens models	SL940A & TL936A	SL940P & TL936P	SL940M	SL1250A & TL1250A	SL1250P & TL1250P [1]
Iris type	Auto-iris	P-iris	Manual	Auto-iris	P-iris
Mount type [2]	CS	CS	CS	CS	CS
Focal length	9-40mm, 9-36mm for TL936 motorized lens			12-50mm	
Sensor sizes	up to 1/2.3"			up to 1/1.7"	
Field of view	Varifocal 39° - 9° on 1/2.3" sensor, 36° - 9° for TL936 motorized lens			Varifocal 36° - 8° on 1/1.7" sensor 30° - 7° on 1/2.3" sensor	
Resolution	4K compatible (5+MP)			True 4K (12MP)	
Focus range [3]	2m to ∞			2m to ∞	
F/#	F/1.5 to close			F/1.8 to close	
IR Correction	Day/Night			Day/Night	
Lens length	50mm			52mm	

1.SL1250 lenses also available in manual iris. 2.Motorized lenses also available in D25 25mm diameter smooth board mount. 3.MOD may be shortened with extenders.

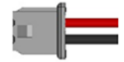
R 240410

IR Cut/ Selectable Optical Filter Specifications

for N4, R4, N6, R6 lens versions

Electrical specifications	
Drive	DC
Operating voltage	4.0V
Maximum switching time	300ms
Drive coil resistance	130Ω
Connector type	Housing: Molex 51021-0200 Terminal: Molex 50058-8000
Cable length	150mm

Mode	Pin 1	Pin 2
Filter 1	L	H
Filter 2	H	L
Wire color	Red	Black

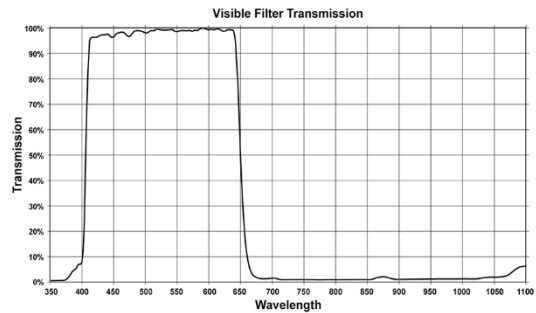


Filter optical specifications

The lens has 2 internal optical filters which can be selected electronically.

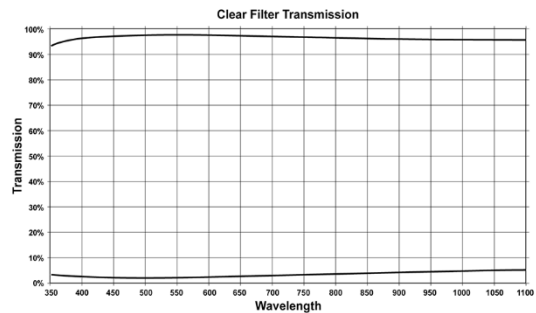
Visible bandpass filter

Type	Visible transmission notch filter
Spectrum	405 +/- 10nm: T = 50% 420 – 600nm: T >= 93% ave 650 +/- 10nm: T = 50% 700 – 1000nm: T < 5% max 1000 – 1100nm: T < 10% ave



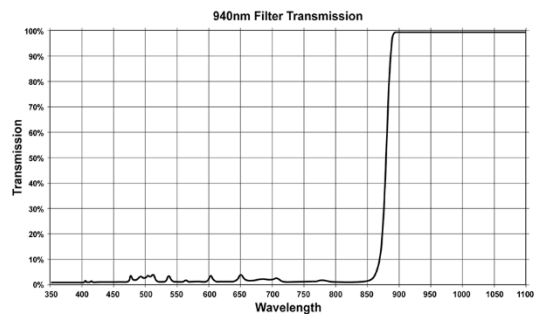
Clear glass filter

Type	AR coated clear glass
Spectrum	400 – 650nm: t >= 95% 650 – 1050nm: t >- 93.5%



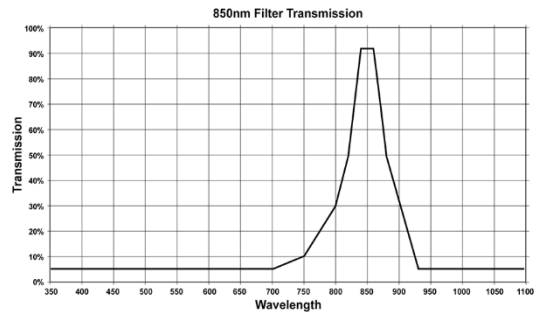
Long pass filter for 940nm illumination

Type	Long wave pass filter for 940nm illumination
Spectrum	400 nm – 840 nm: T <= 5% 880 +/- 10 nm: T = 50% 900 nm – 980 nm: T => 95%



IR bandpass filter for 850nm illumination

Type	Notch filter for 850nm illumination
Spectrum	400-700nm : T < 5% ave 820 +/- 10nm: T=50% 850nm: T >= 93% 880 +/- 10nm: T = 50% 900-1050 : T < 5% ave



Other wavelength filters may be possible; please contact us for more information.