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See3CAM_12CUNIR

Lens Filter Datasheet

Revision 1.1
Tuesday, October 28, 2014

Contents

See3CAM_12CUNIR

1   Revision History

Rev	Date	Description	Author
1.0	27-Oct-2014	Initial Draft	Hardware Team
1.1	28-Oct-2014	Modified Description	Hardware Team

2   Description

Visible-Block & NIR-Pass filters block the visible spectrum of light and pass only the IR spectrum. These lenses are typically used with IR light sources to capture the scene illuminated with the IR source. They block the visible spectrum of light entering the camera sensor. With See3CAM_12CUNIR, this lens is used in applications where the IR is the only illuminating source. As the See3CAM_12CUNIR camera image sensor has better quantum efficiency in NIR spectrum, this filter is used with See3CAM_12CUNIR.

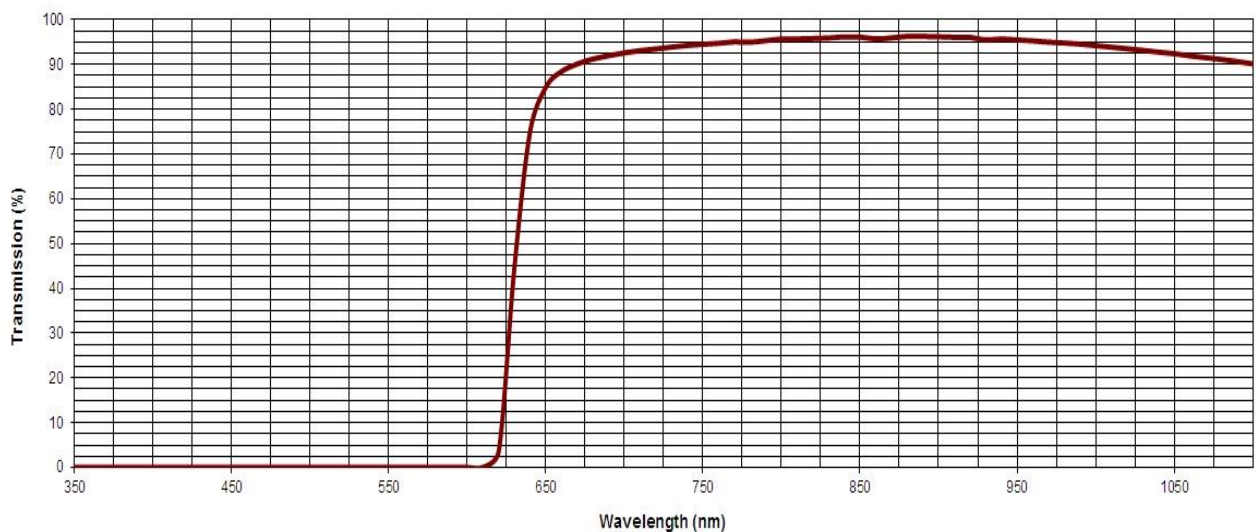The lens used in See3CAM_12CUNIR comes with two variants. They are
1. Lens without Filter (Works in both visible and NIR region)
2. Lens with Visible block and NIR pass filter (Works only in NIR Region)

2.1   Filter Specifications

Description	Visible Block NIR Pass Filter
Spectral Response	Please refer to the Filter Transmission Chart
Allowed Wavelength	Passes 640 nm and above
Cut-off wavelength	Absorbs 635 nm and below

2.1.1   Filter Transmission Chart

Visible Block NIR Pass Filter Transmission Curve

2.1.2 Data Points

Wavelength (nm)	Transmission (%)
1100.00	90.14
1050.00	92.42
1000.00	94.21
950.00	95.50
900.00	96.19
850.00	96.13
800.00	95.71
750.00	94.51
700.00	92.60
650.00	84.95
640.00	75.21
630.00	44.87
620.00	3.66
610.00	0.02
600.00	0.00
550.00	0.00
500.00	0.00
450.00	0.00
400.00	0.00
350.00	0.00

3 Conclusion

This document depicts the filter transmission chart of the lens filter used in See3CAM_12CUNIR.
For more information, please contact sales@e-consystems.com