



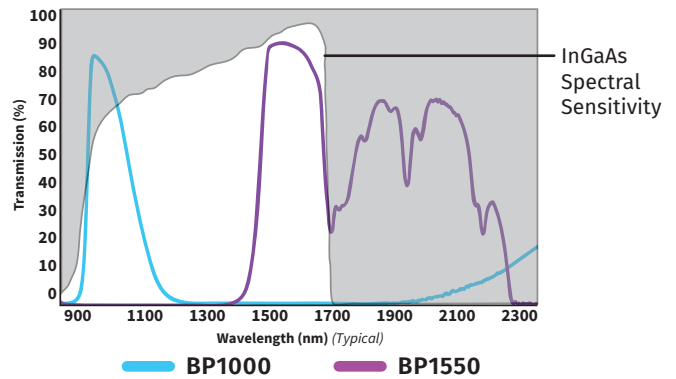
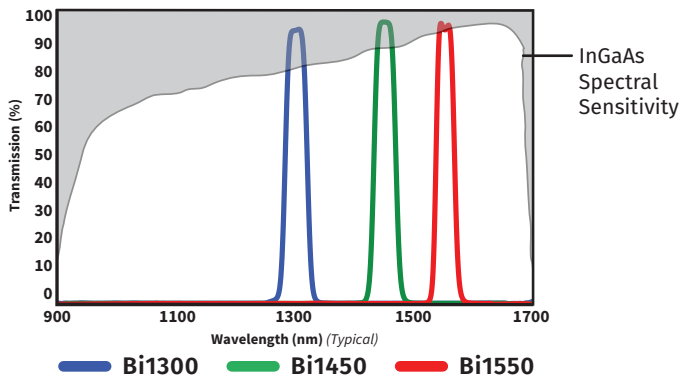
SWIR (Short-Wave Infrared) Filters enhance the image quality of InGaAs camera technology for a variety of machine vision applications. SWIR Filters are useful for applications imaging from 900-2300nm.

BANDPASS

SWIR Bandpass Filters are designed to pass the most common SWIR LED wavelengths. They are hard coated with a BBAR (broad-band anti-reflection) coating optimized for imaging in the SWIR. SWIR Filters can be used for various inspection tasks in the food and beverage, woodworking, textile or automotive industries.

PART #	DESCRIPTION	USEFUL RANGE	SE ✓
Bi1300	SWIR Interference Bandpass	1290-1310nm	
Bi1450	SWIR Interference Bandpass	1440-1460nm	
Bi1550	SWIR Interference Bandpass	1540-1560nm	

PART #	DESCRIPTION	USEFUL RANGE	SE ✓
BP1000	SWIR Bandpass	930-1030nm	●
BP1550	SWIR Bandpass	1485-1645nm	●

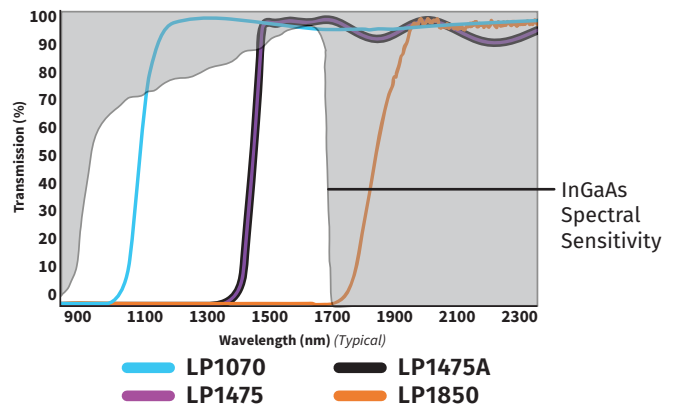
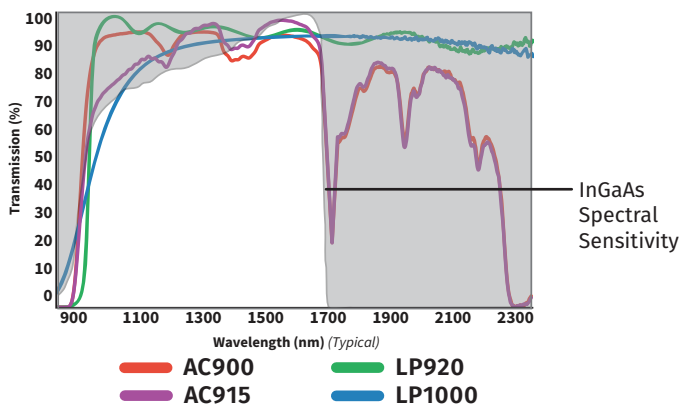


LONGPASS

SWIR Longpass Filters are designed to pass a broad spectrum of SWIR wavelengths while blocking visible light. They are available in both glass and acrylic options. LP1800 is made with a Germanium substrate and is also an ideal solution for protection windows, when (thermal) imaging up to 12 microns.

PART #	DESCRIPTION	USEFUL RANGE	SE ✓
AC900	Acrylic SWIR Longpass	930-1650nm	●
AC915	Acrylic SWIR Longpass	915-1650nm	●
LP920	SWIR Longpass	930-2300nm	
LP1000	SWIR Longpass	1010-2300nm	●

PART #	DESCRIPTION	USEFUL RANGE	SE ✓
LP1070	SWIR Longpass	1100-2300nm	●
LP1475	SWIR Longpass	1490-2300nm	
LP1475A	SWIR Longpass/Ext VIS Block	1490-2300nm	
LP1850	SWIR Longpass	1900-12,000nm	●

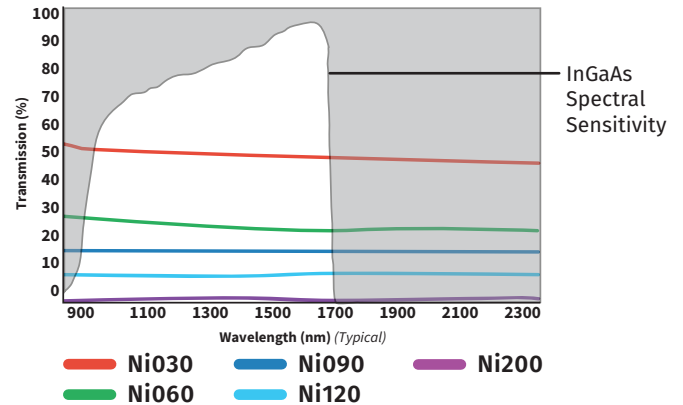




NEUTRAL DENSITY

NiSeries Neutral-Density Filters feature uniform attenuation simultaneously over the visible and SWIR range, from 400-2000nm, and can be used with CCD/CMOS and InGaAs camera systems. They have identical male and female threads, so they can be stacked with other Ni Filters to achieve various optical densities.

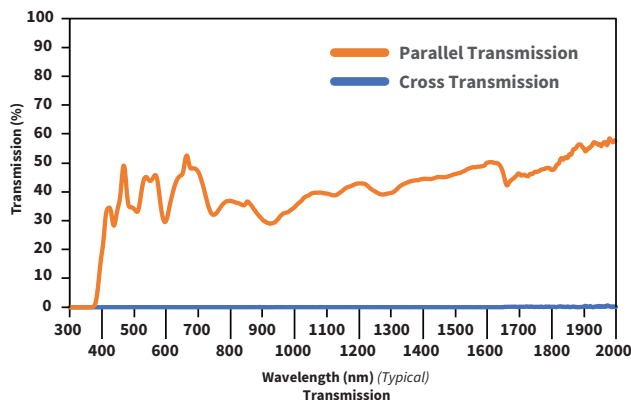
PART #	DESCRIPTION	USEFUL RANGE
Ni030	Low Reflectivity 50% Transmission	400-2000nm
Ni060	Low Reflectivity 25% Transmission	400-2000nm
Ni090	Low Reflectivity 12.5% Transmission	400-2000nm
Ni120	Low Reflectivity 6.25% Transmission	400-2000nm
Ni200	Reflective 1% Transmission	400-2000nm



POLARIZERS

Pi1000 Series Wire-Grid Polarizer Filters are effective in both the visible and SWIR range, from 400-2000nm, and are useful for reducing specular glare. Wire-Grid Polarizer Filters can be mounted to the lens and LED light source, have an average contrast ratio of up to 8,000:1 and have an operating temperature rating of 100° C per 1,000 hours.

PART #	DESCRIPTION	USEFUL RANGE	CONTRAST RATIO
PS1000	VIS/SWIR Wire Grid Linear Polarizer Film	400-2000nm	Up to 8000:1
PSA1000	VIS/SWIR Wire Grid Linear Polarizer Film with Adhesive Back	400-2000nm	Up to 8000:1
PR1000	VIS/SWIR Wire Grid Linear Polarizer Mounted Filter	400-2000nm	Up to 8000:1
PG1000	VIS/SWIR Wire Grid Linear Polarizer Unmounted Filter	400-2000nm	Up to 8000:1



WAVELENGTH	CONTRAST RATIO
450nm	2050: 1
550nm	4250: 1
650nm	8300: 1
850nm	1000: 1
1450nm	1000: 1
2000nm	1000: 1