TORRENT PHOTONICS

OEM MULTISPECTRAL CAMERA

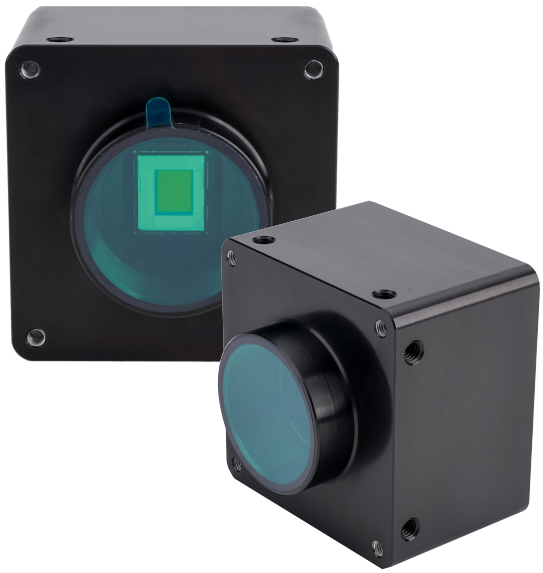
PixelCam

9-Band SWIR Camera

The PixelCam 9 band SWIR camera utilizes the latest developments in high-performance SWIR (Short Wave Infrared) image sensors combined with Torrent's patented ability to create pixelated filters to create a multispectral imaging system capable of discerning 9 distinct spectral ranges between 1000nm and 1700nm. This opens the door to a wide range of applications where distinguishing the different SWIR "colors" enables the possibility to identify other subjects much more clearly, just as a color image in the visible spectrum does when compared to a monochrome one. The use of the SWIR spectrum though has many advantages such as the ability to penetrate deeper into certain substances and even see right through them when a visible image would be occluded or even completely opaque.

Applications

- Aerial Mapping
- Biomedical Imaging
- Machine Vision
- Product Screening
- Remote Sensing
- Unmanned Systems
- Surveillance and Authentication



Contact our engineers to discuss your application

727.544.3736 • sales@torrentphotonics.com • torrentphotonics.com

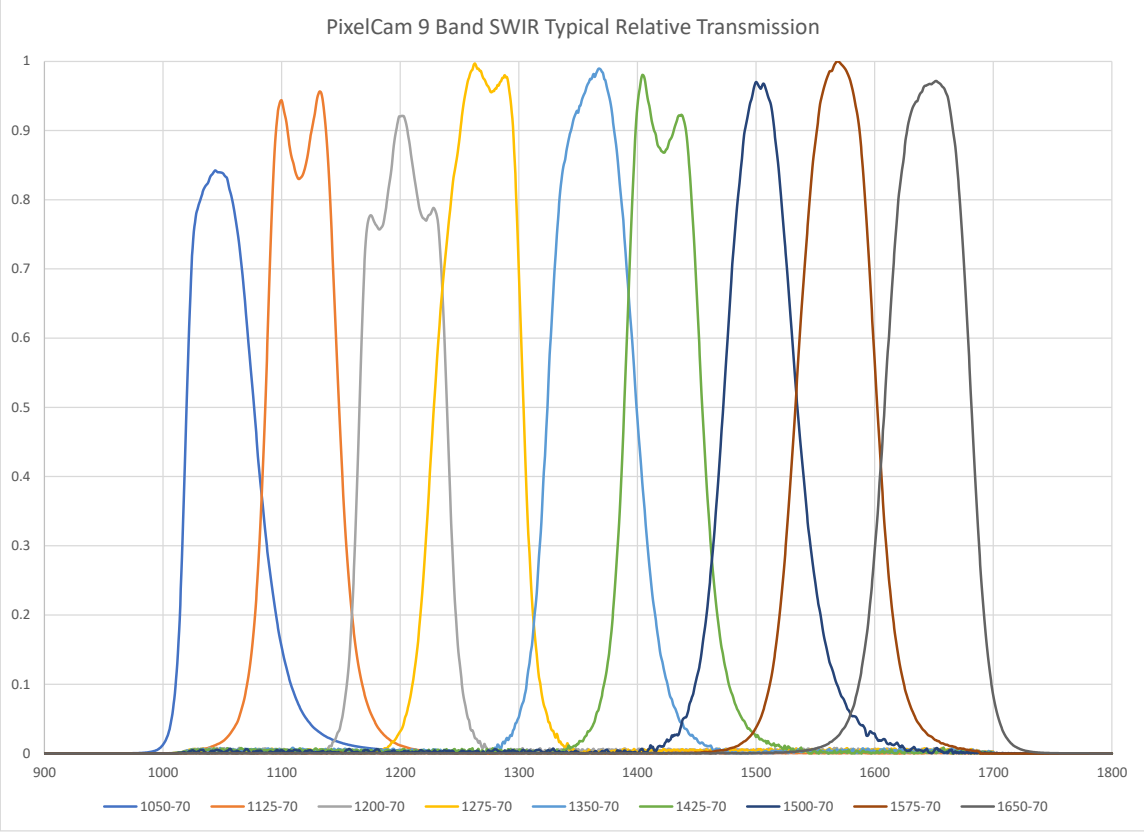
	9 Band SWIR Camera
Spectral Response	1000nm - 1700nm
Image Sensor Resolution	1280 x 1024 pixels
Sensor	InGaAs Area CMOS 5.0µm Pixel Pitch
Shutter Type	Global Shutter
Filter Resolution	15.0µm Pixel Pitch Image Sensor Pixels Binned 3x3
Spectral Bands (9)	1050-70, 1125-70, 1200-70, 1275-70, 1350-70, 1425-70, 1500-70, 1575-70, 1650-70
Active Area	6.40mm (H) x 5.12mm (W)
Frame Rate	90 fps at Full Resolution
Exposure Time (Min)	15 µs
Exposure Time (Max)	0.5 sec
Optical Interface	C Mount
Digital Output	GigE Vision
Dimensions	50 x 50 x 42.5 mm
Weight	139g
Power Supply	10 to 25 V (DC)
Power Consumption	4 W (dep. on operating mode)

Benefits

- Custom VIS-NIR-SWIR Spectral Bands
- Portable Size, Weight, and Power Consumption
- Robust, High Reliability, and Scalable Production
- Simultaneous Multi-band Imaging

OEM Customization

- Application-specific Spectral Bands
- Custom Pixel-scale Mosaic Patterning
- Sensor, Camera, and Housing Options
- Mechanical and Environmental Requirements
- Proof-of-concept Prototypes to High-volume Production



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