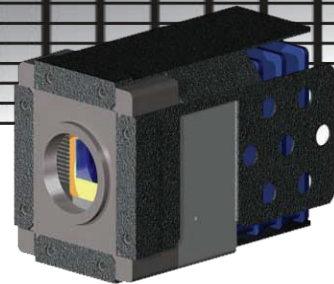


# Aphotik<sup>\*</sup>

*defines low light cameras*

*Preliminary*



## ExLL-07MGA Ultra Low Light Camera Visible Light Thru SWIR

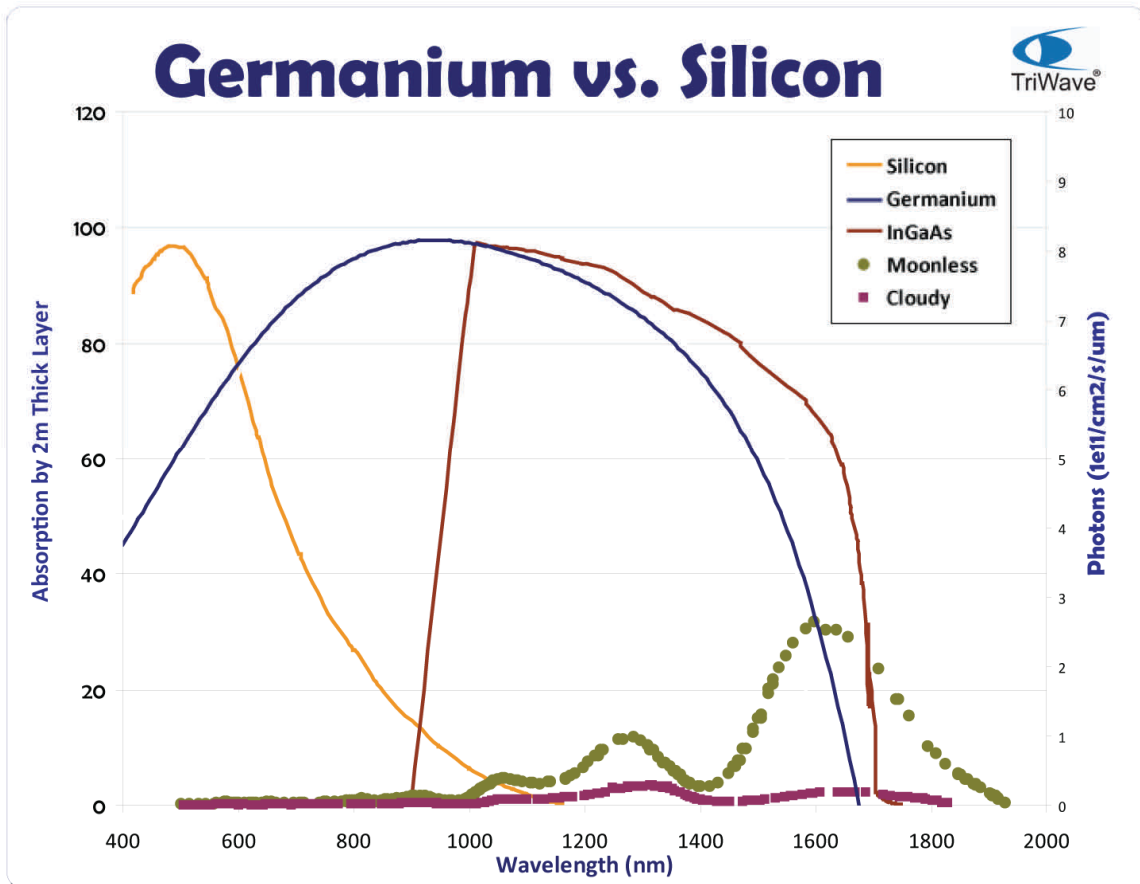
### **Key Features:**

- VGA resolution
- Extended dynamic range of full daylight through overcast starlight
- Extended spectral response of full visual through SWIR
- Superior intrascene dynamic range
- Zero blooming dielectrically isolated pixels
- Analog and digital output
- 12 to 24 volt universal power input
- Small size—4.0" x 4.0" x 2.5"

The ExLL-07MGA camera utilizes an extended spectral range with a Germanium enhanced CMOS imager that is capable of viewing images under overcast starlight conditions. It does not require image intensification. The natural spectral response for Germanium extends from 400 nm to 1650, resulting in a true daytime/nighttime capability. The SWIR response senses the Earth's natural high intensity Night Glow for high performance night imaging. This low-cost technology eliminates the need for image fusion techniques once required to achieve SWIR spectral response. Cameras with this sensitivity and resolution across the visible and into the SWIR have many uses in both commercial security, biometrics, border security, spectroscopy and many military and homeland security applications.

## ExLL-07MGA CAMERA SPECIFICATIONS

Imager	Germanium enhanced CMOS imager
Resolution	744 x 576 active pixels
Gain	Automatic Gain Control (AGC)
Sensitivity	Visible through SWIR
SNR	64 dB
Noise Equivalent Irradiance	$3.5 \times 10^9$ photons/cm <sup>2</sup> /s
Noise	25 electrons
Quantum Efficiency	>50% from 500nm to 1500nm
Fill Factor	50%
Spectral Response	400 nm to 1650 nm
Pixel Pitch	10µm x 10µm
Full Well Pixel	25,000 electrons
Video Out	Analog—SMPTE RS170 (NTSC) Digital—12 bit ITU-R BT.656
Camera Control	VISCA/RS232
Exposure Times	50 usec to 33 msec at 30fps
Scan Modes	Progressive and interlace
Lens Mount	C or CS Mount, 1/2" format
Power	11.5-28 VDC (12 VDC nominal)
Housing	All metal enclosure measuring 4.0" x 3.0" x 2.5"



Aphotik

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