

NightVista[®] M619 Low Light Level Camera



The NightVista[®] M619 camera represents the next generation in EOTECH's industryleading digital low-light EBAPS[®] sensor technology. Incorporating EOTECH's proprietary ISIE19 Electron Bombarded Active Pixel Sensor (EBAPS) for extreme low light sensitivity, the camera offers a 1920 × 1920 pixel resolution at 160 Hz frame rate, and can operate in either rolling shutter or pseudo-snapshot mode.

With ISIE19 sensor capabilities and EOTECH-proprietary image-processing algorithms, the M619 provides enhanced visual acuity for today's warfighter systems. Features of the ISIE19 sensor — including high bit depths for increased linear dynamic range, equivalent background noise at a higher operating temperature than that of Gen-III technology, and patented zero-halo technology — deliver high-quality imagery in even the most extreme low light conditions. The camera's high frame rate minimizes the blur and image lag typically observed in dynamic imaging environments with lower frame-rate digital cameras. Its digital output offers unmatched flexibility for data sharing and providing input to augmented reality systems.

A camera core that includes the ISIE19 sensor on a headboard and a high-voltage power supply is also available. Contact the factory for details.

APPLICATIONS

- Night/day surveillance and reconnaissance
- Pilotage/navigation of air and ground vehicles
- · Multi-sensor payloads

FEATURES / BENEFITS

- High linear dynamic range
- Low background noise
- Zero-halo technology
- Digital video output
- High frame rates
- 5



High Dynamic Range Imagery (Vignetting from the Lens)

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TECHNICAL SPECIFICATIONS

IMAGE FORMAT	1920 × 1920 pixels
PIXEL SIZE	9.117 µm square
SENSOR FORMAT	24.7mm diagonal
SPECTRAL RESPONSE	Night mode (intensified): 400 nm – 900 nm
	Day mode (non-intensified): ~800 nm - ~1050 nm
FRAME RATE	155 Hz full frame, with higher frame rates in windowed mode
SHUTTER TYPE	Rolling shutter or pseudo snapshot
OUTPUT SIGNAL FORMAT	CoaXPress, 16-bit depth
CONTROL	USB Type C Serial
DEFECTIVE PIXELS	< 0.1%, a detailed cosmetic specification available upon request
VOLTAGE	9V external power or powered over CoaXPress
POWER	8 W nominal @ 160 fps
DIMENSIONS, $W \times H \times D$	2.5" × 2.3" ×4.8"
WEIGHT	425g (without lens)
LENS MOUNT	C-mount, F-mount, or PVS-14, depending on camera variant ordered
CAMERA FUNCTIONS	Non-Uniformity Correction (NUC), Bad Pixel Replacement (BPR), Automatic
	Gain Control (AGC), horizontal image flip, Window/frame-rate options, Genlock (ext. signal sync), Local Tone Mapping (LTM)
INCLUDED SOFTWARE	Control Software (GUI)

ORDER INFORMATION

NightVista® M619 Camera PVS-14 Lens Mount, PVS-14 Lens

301409-01

NightVista® M619 Camera w/ C-mount Lens Mount **301409-02**

NightVista® M619 Camera w/ F-mount Lens Mount **301409-03**

CAMERAS INCLUDE

- CoaXPress Cable (Qty 2)
- Serial / Lab Power Supply Cable
- USB Type C to Type A Cable
- Control Software (GUI)

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NOTE: Additional technical details are available upon request.

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