

ERUTM64-19

ERUTM64 Series

640 x 512 Uncooled LWIR Thermal Module - 19 mm Lens

The ERUTM64-19 pairs a 640 x 512 uncooled VOx detector with a 19 mm athermal lens, giving a balanced 22.9 deg horizontal field of view with roughly twice the detection range of the 9 mm configuration. It is the most widely specified lens in the ERUTM64 series for UAV gimbals, security cameras and portable observation

FIELD OF VIEW & DETECTION (typical, 1.7 m x 0.5 m human target)

Lens 19 mm | HFOV 22.9 deg | VFOV 18.4 deg Detection ~1800 m | Recognition ~900 m

Detection ranges are estimates (Johnson criterion) and vary with target size, thermal contrast and atmosphere.

SPECIFICATIONS

Detector type	Uncooled vanadium oxide (VOx) infrared focal plane array
Resolution	640 x 512
Pixel pitch	12 um
Spectral range	8 - 14 um (LWIR)
NETD	<=35 mK @ 25 C, F#1.0
Detector frame rate	50 Hz
Lens (standard)	19 mm athermal, F#1.0
Field of view (H x V)	22.9 deg x 18.4 deg
Digital zoom	1x - 4x
Image enhancement	Built-in image enhancement and digital zoom
Palettes	Black hot, white hot, iron red, red hot, 0-10 levels
Video interface	BT.656 / CameraLink / MIPI / USB / SDI (interface board selectable)
Communication	UART x 2 / RS232 x 2
Supply voltage	5 V +/- 0.5 V
Power consumption	< 0.85 W @ 25 C (without expansion pack); < 1.2 W with expansion pack
Weight	< 25 g (excluding lens and flange)
Dimensions	26 mm x 26 mm x 25 mm
Operating temperature	-40 C to +60 C
Storage temperature	-40 C to +80 C
Vibration / shock	6.06 g random vibration, all axes; 80 g @ 4 ms sawtooth, 3 axes 6 directions
Humidity	5% - 95%, non-condensing

TYPICAL APPLICATIONS

UAV thermal payloads, security and surveillance, border monitoring, marine observation, portable thermal devices