Raytheon

# Uncooled Infrared Camera 320 (UE320)

## A Fully Integrated, Medium Format Uncooled IR Camera

**The Uncooled Infrared Camera UE320 is a high-performance, low-cost, highly integrated device designed for LWIR imaging applications**

### Benefits

- 320 × 240 format
- Compact form factor
- All digital interface
- Simplified integration/ diagnostics
- Cost effective solution

**UE320**

The UIRC320 is a medium format camera designed for use in LWIR imaging applications. It is made up of a Raytheon 320 × 240 Uncooled Focal Plane Assembly (UFPA) with an IR objective lens assembly, and a compact stack-up of three small electronics boards (1.5”W × 2.5”L × 1.0”H). A flexible cable connects the optics and UFPA to the electronics boards, thus allowing for various physical orientations between the two.

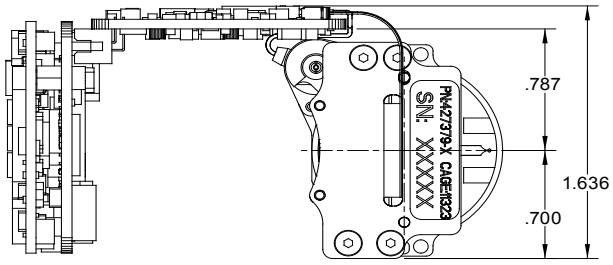
The UIRC320 has all of the necessary features for imaging applications and more: digital zoom, symbology, frame integration (for improved NEDT), automatic gain control, micro display drive, and a graphical user interface for full control of all features. For its system interface, the UIRC320 uses CameraLink, which has become the de facto industry standard.

The UIRC320 comes factory calibrated to a wide environmental temperature range and, at an ambient temperature of 293K, can achieve an intra-scene dynamic range of greater than 100K.

The UIRC320 is designed to be small, light weight, and low power. Due to its excellent response, operability, sensitivity, and uniformity, it delivers unsurpassed high resolution IR imagery.

The UIRC320 is the optimal choice for a wide variety of applications, including missile seekers and warners; weapons sights, surveillance, driver’s vision enhancement, and chemical and narcotic detection and identification.

# Uncooled Infrared Camera 320

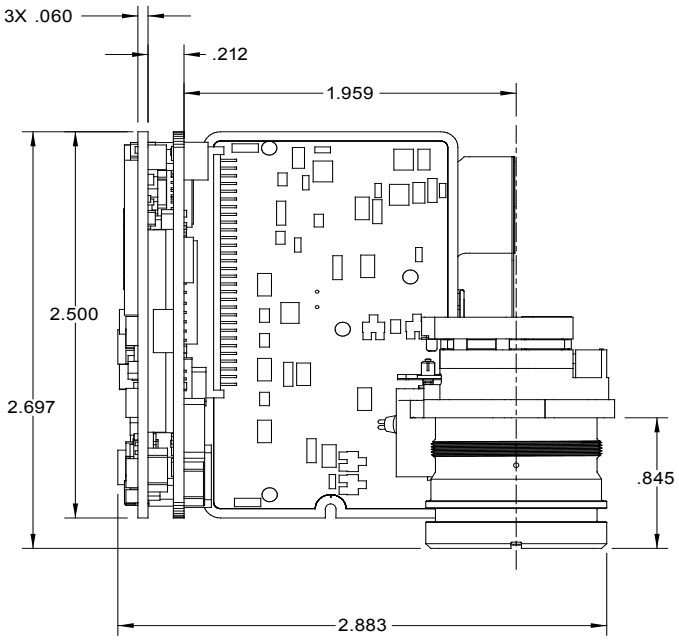


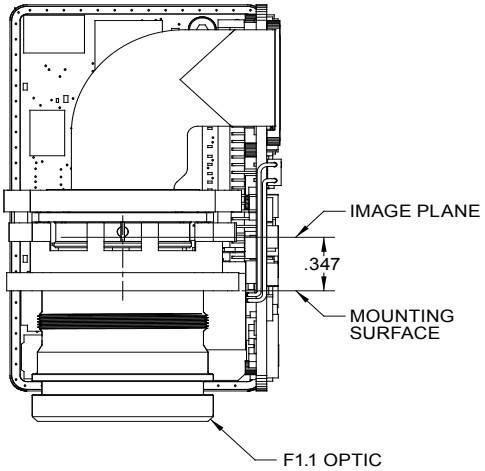

## Specifications

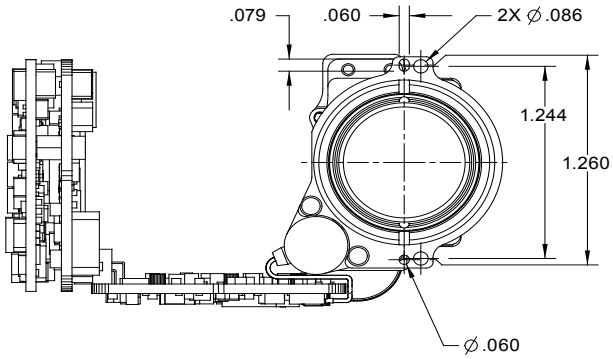
| | |
|---|---|
| Pixel pitch | 25 µm |
| NEDT* | <50 mK |
| Thermal time constant | <16 ms |
| Mass | <108g |
| Power dissipation | <1.6 W |
| Operating ambient temperature | -40°C to +71°C |
| Spectral range | 7.5 to 13.6 µm** |
| Dewar vacuum life | >10 years @ 25°C |
| Pixel operability | >98% |
| Full frame rate | 60 Hz |
| Operating mode | Progressive, interlaced |

*f/1.0, 25° C, 30 Hz optics adjusted

**other bandwidths available





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