

American-made, NDAA compliant thermal camera cores for defense drones

## Calidran Thermal Camera — Specifications

*Uncooled longwave-infrared (LWIR) camera core for small UAS*

### CORE

|                |                              |
|----------------|------------------------------|
| Resolution     | 640 × 480                    |
| Pixel pitch    | 12 μm                        |
| Detector       | Uncooled LWIR microbolometer |
| Spectral range | 8–14 μm (LWIR)               |
| NETD           | <50 mK typ.                  |
| Frame rate     | Up to 60 Hz                  |

### OPTICS

|                     |            |
|---------------------|------------|
| Wide                | 9 mm f/1.3 |
| Longer-range option | 15 mm      |

### EXPORT

|                |                    |
|----------------|--------------------|
| Classification | EAR ECCN 6A003.b.4 |
|----------------|--------------------|

### OPERATING TEMPERATURE

|        |                  |
|--------|------------------|
| System | –20 °C to +55 °C |
|--------|------------------|

### SIZE & WEIGHT

|          |                   |
|----------|-------------------|
| Mass     | Under 40 g        |
| Envelope | ≤ 40 × 40 × 40 mm |

### POWER

|         |                                                                               |
|---------|-------------------------------------------------------------------------------|
| Input   | 5 V regulated (standard drone bus)                                            |
| Typical | ~1.5 W (steady imaging)                                                       |
| Peak    | ~5 W brief (<1 s) during flat-field calibration; average mission power ~1.5 W |

**Prototype phase. Not a finished datasheet.**