

LWIR Continuous zoom – Commercial off the shelf lens

PECAN

LWIR 24-105mm F/1.1-1.55 Continuous zoom Lens
for 640 x 480 x 17μ uncooled detectors



FEATURES / APPLICATIONS / CAPABILITIES

- Cost effective solution for HLS
- Rugged design for harsh environments
- Supports detector types with up to 13.6mm diagonal

| | HFOV for Wide (24mm) | | | | HFOV for Narrow (105mm) | | | |
|-----|----------------------|----------|-----------|-------------|-------------------------|----------|-----------|-------------|
| | 640x480 | 1024x768 | 1280x1024 | IFOV (mrad) | 640x480 | 1024x768 | 1280x1024 | IFOV (mrad) |
| 12u | 18.2° | | | 0.028 | 4.2° | | | 0.0065 |
| 17u | 25.5° | | | 0.04 | 5.9° | | | 0.0093 |

| PARAMETER | | VALUE | NOTES |
|-----------|-----|-------|-------|
| Main | Sub | | |

| 🕒 OPTICAL | | | |
|---------------------------------|-----------------------|---------------------------------|-------------------------------|
| Focal Length / F# | | 24-105mm F1.1-1.55 | |
| Detector (FPA) type / size | | Up to 640 x 480 x 17μ | |
| Working Spectral Range | | 8-14μ | |
| Optical Coatings | All internal surfaces | High Efficiency AR | |
| | Front surface | High Durability AR | DLC is available upon request |
| ⚙️ MECHANICAL | | | |
| Mechanical Back Focal Length | | 11.3mm | |
| Focus / Zoom mechanism | | Motorized | |
| Focus range | | 5m / 20m – Infinity | For WOFV / NFOV accordingly |
| Through zoom boresight | | ≤ 0.15 mm at the focal plane | |
| NFOV boresight retention | | ≤ 0.045 mm at the focal plane | |
| Total Weight | | 1Kg | |
| Ext. Dimensions ø x length (mm) | | 85 x 130 | |
| 💡 ELECTRICAL | | | |
| Power Input | | 12VDC, 1.0A | |
| Communication Protocol | | RS-422/232 Full Duplex | |
| 🌿 ENVIRONMENTAL | | | |
| Operating / Storage Temperature | | -25°C to +55°C / -40°C to +80°C | |
| Shock and Vibrations | | Per applicable standard | |
| Front lens sealing | | IP66 | IP67 By default |

*All values are nominal: to within ±5%

