-- MWIR Continuous zoom - Commercial off the shelf lens

MOSQUITO

MWIR 15-230mm F/3.6 Continuous zoom Lens for $640 \times 512 \times 10 \mu$ cooled detectors

FEATURES / APPLICATIONS / CAPABILITIES

- Ultra Compact and light weight lens
- "ZERO BORESIGHT" design for high accuracy demanding applications
- Focus is maintained throughout the entire zoom range, with extremely fast zoom and focus response



| | HFOV for Wide (15mm) | | | | HFOV for Narrow (230mm) | | | |
|-----|----------------------|----------|-----------|-------------|-------------------------|----------|-----------|-------------|
| | 640x512 | 1024x768 | 1280x1024 | IFOV (mrad) | 640x512 | 1024x768 | 1280x1024 | IFOV (mrad) |
| 10u | 24.1° | | | 0.038 | 1.6° | | | 0.0025 |
| 12u | | | | | | | | |
| 15u | | | | | | | | |
| 16u | | | | | | | | |
| | | | | | | | | |

| PARAMETI | ΞR | VALUE | NOTES | | | | |
|--|-----------------------|-------------------------------------|-------------------------------|--|--|--|--|
| Main | Sub | | | | | | |
| @ ODTIOA | | | | | | | |
| ◎ OPTICAL | | | | | | | |
| Focal Length / F# | | 15-230mm F/3.6 | | | | | |
| Detector (FPA) type / size | | Up to 640 x 512 x 10μ | | | | | |
| Working Spectral Band | | 3 – 5µ | | | | | |
| Optical | All internal surfaces | High efficiency AR coating | | | | | |
| Coatings | Front surface | High durability AR coating | DLC is available upon request | | | | |
| CSH | | 12 ± 1mm | | | | | |
| MECHANICAL TO THE REPORT OF THE PROPERTY OF TH | | | | | | | |
| Focus / Zoom mechanism | | Motorized | | | | | |
| Focus Range | | 15m / 30m – Infinity | For WOFV / NFOV accordingly | | | | |
| Through zoom boresight | | < 0.075mm radius at the focal plane | | | | | |
| NFOV boresight retention | | < 0.03mm radius at the focal plane | | | | | |
| Total Weight | | 280gr | | | | | |
| Ext. Dimensions ø x length (mm) | | 78 X 88 | | | | | |
| ♥ ELECTRICAL | | | | | | | |
| Power Input | : | 12VDC, 1.0 A | | | | | |
| Communica | tion Protocol | RS-422/232 Full Duplex | | | | | |
| 6 ENVIRONMENTAL | | | | | | | |
| Operating / | Storage Temperature | -25°C to +50°C / -40°C to +70°C | | | | | |
| Shock and V | /ibrations | Per applicable standard | | | | | |
| Front lens s | ealing | IP66 | IP67 By request | | | | |

^{*}All values are nominal: to within $\pm 5\%$

