SWIR continuous zoom – Commercial off the shelf lens

CROCUS

SWIR 50–500mm F/5.0 Continuous zoom Lens for up to 1280 x 1024 x 10µ detectors

FEATURES / APPLICATIONS / CAPABILITIES

- Also available with back X2 extender 100-1000mm F/10
- High performance true SWIR zoom lens
- "ZERO BORESIGHT" design for high accuracy demanding applications

| | HFOV for Wide (50mm) | | | HFOV for Narrow (500mm) | | |
|-----|----------------------|-----------|-------------|-------------------------|-----------|-------------|
| | 640x512 | 1280x1024 | IFOV (mrad) | 640x512 | 1280x1024 | IFOV (mrad) |
| 10u | 7.3° | 14.6° | 0.011 | 0.73° | 1.5° | 0.0011 |
| 15u | 11° | | 0.017 | 1.1° | | 0.0017 |

| PARAMETER | VALUE | NOTES | | | | |
|---------------------------------|----------------------------------|-----------------------------|--|--|--|--|
| Main Sub | | | | | | |
| © OPTICAL | | | | | | |
| Focal Length / F# | 50-500mm / F5.0 | | | | | |
| Detector (FPA) type / size | Up to 1280 x 1024 x 10µ | | | | | |
| Working Spectral Range | 0.9-1.7µ | | | | | |
| S MECHANICAL | | | | | | |
| Mechanical Back Focal Length | 17.5mm | C-mount compatible | | | | |
| Focus / Zoom mechanism | Motorized | | | | | |
| Focus Range | 10m / 100m – Infinity | For WFOV / NFOV accordingly | | | | |
| Through zoom boresight | < 0.15mm radius at focal plane | | | | | |
| NFOV boresight retention | < 0.075 mm radius at focal plane | | | | | |
| Total Weight | 3.7Кg | | | | | |
| Ext. Dimensions ø x length (mm) | 117 x 460 | | | | | |
| P ELECTRICAL | | | | | | |
| Power Input | 12VDC, 1.0A | | | | | |
| Communication Protocol | RS-422/232 Full Duplex | | | | | |
| C ENVIRONMENTAL | | | | | | |
| Operating / Storage Temperature | -25°C to +55°C / -40°C to +75°C | | | | | |
| Shock and Vibrations | Per applicable standard | | | | | |
| Front lens sealing | IP66 | IP67 By request | | | | |

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

