

# SupIR 45-900mm f/4.0, Motorized Continuous Zoom 680425 / 680426

**NEW**



**HD  
FORMAT**

MWIR | ZOOM

### WFOV(45mm)

| HFOV | 320x256 | 480x384 | 640x512 | 1280X1024 |
|------|---------|---------|---------|-----------|
| 30μ  | 11.4°   |         |         |           |
| 20μ  | 7.9°    | 11.4°   | 14.3°   |           |
| 15μ  | 6.0°    | 8.8°    | 11.4°   |           |
| 10μ  |         |         | 7.9°    | 14.3°     |

### WFOV(72mm)

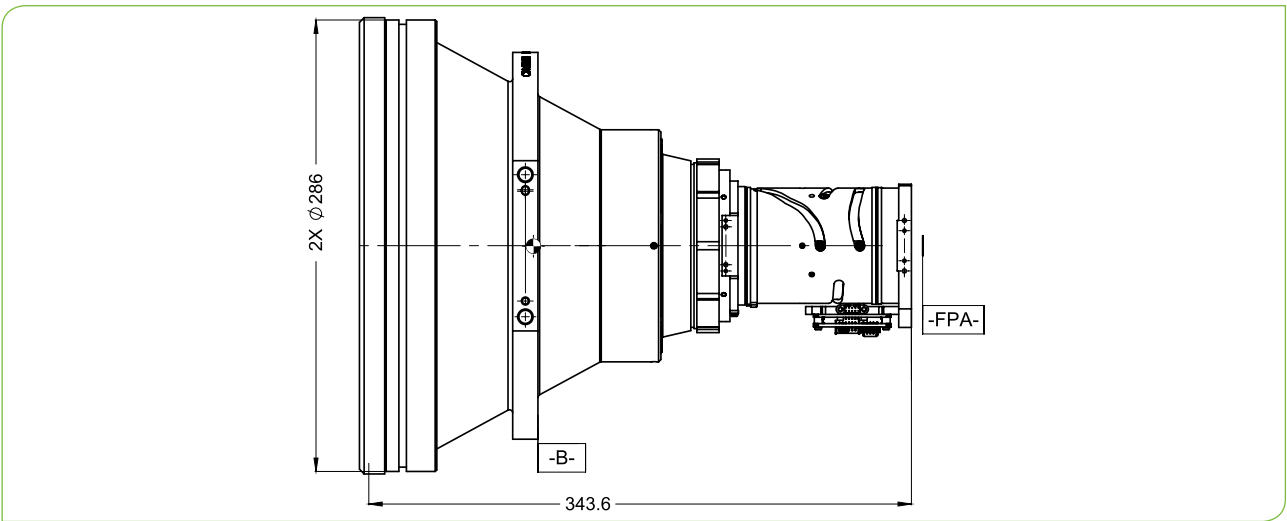
for configuration 680425 003/00

| HFOV | 320x256 | 480x384 | 640x512 | 1280X1024 |
|------|---------|---------|---------|-----------|
| 15μ  | 5.0°    | 7.3°    | 9.3°    |           |
| 10μ  |         |         | 5.0°    | 9.3°      |

### NFOV(900mm)

| HFOV | 320x256 | 480x384 | 640x512 | 1280X1024 |
|------|---------|---------|---------|-----------|
| 30μ  | 0.6°    | 0.9°    |         |           |
| 20μ  | 0.4°    | 0.6°    | 0.8°    |           |
| 15μ  | 0.3°    | 0.5°    | 0.6°    |           |
| 10μ  |         |         | 0.4°    | 0.8°      |

| Property                        |                           | Value   |             |
|---------------------------------|---------------------------|---|-------------|
| <b>Optical</b>                  |                           | <b>WFOV</b>   | <b>NFOV</b> |
| Focal Length                    |                           | 45mm/72mm*  | 900mm       |
| F/#                             |                           | 4.0   |             |
| Average transmission (3.4-5μm)  |                           | 70% (LRHC)  |             |
| 680425                          | Based on Zoom Lens:       | 15-300mm f/4 680084   |             |
|                                 | Cold stop to FPA Distance | 19.4mm  |             |
|                                 | Cold Stop CA              | Ø4.85mm   |             |
|                                 | BFL                       | 25.1mm in air   |             |
| 680426                          | Based on Zoom Lens:       | 15-300mm f/4 680204   |             |
|                                 | Cold stop to FPA Distance | 20.47mm   |             |
|                                 | Cold Stop CA              | Ø5.1mm  |             |
|                                 | BFL                       | 27.12mm in air  |             |
| Distortion (in diagonal)        |                           | <7%   | <5%         |
| Minimum Focus Range             |                           | 5m  | 200m        |
| Nuc (by defocus)                |                           | By defocus (blur to 3mm diameter)                                       |             |
| <b>Mechanical</b>               |                           |   |             |
| Focus Mechanism                 |                           | Motorized   |             |
| Focus Time (minimum range to ∞) |                           | ≤1 sec.   |             |
| Zoom Mechanism                  |                           | Motorized   |             |
| Zoom Time (NFOV to WFOV)        |                           | ≤7 sec. at -32°C; ≤5 sec. at T ≥ 0°C                                    |             |
| Through-zoom boresight          |                           | Within a radius of 0.22 mm at the focal plane along the full zoom range |             |



MWIR | ZOOM

| Property               | Value  |
|------------------------|--|
| <b>Mechanical</b>      |  |
| Weight                 | ~8kg   |
| Max. Dimensions        | Ø286 x 343.6mm   |
| <b>Electrical</b>      |  |
| Lens Control           | Designated lens controller                                       |
| Drive Voltage          | 6-12VDC  |
| Current Consumption    | < 0.5A average, 1.0A peak  |
| Communication Protocol | RS422  |
| <b>Environmental</b>   |  |
| Operation Temperature  | -32°C to +75°C   |
| Storage Temperature    | -54°C to +85°C   |
| Sealing                | IP 67 front element only   |
| <b>Configurations</b>  |  |
| 680425-001             | 45-900mm f/4 CSH=19.4mm 640x512x15µ High Durability              |
| 680425-002             | 45-900mm f/4 CSH=19.4mm 640x512x15µ Low Reflection Hard Carbon   |
| 680425-003             | 72-900mm f/4 CSH=19.4mm 1280x1024x10µ High Durability            |
| 680425-004             | 72-900mm f/4 CSH=19.4mm 1280x1024x10µ Low Reflection Hard Carbon |
| 680426-001             | 45-900mm f/4 CSH=20.5mm 640x512x15µ High Durability              |
| 680426-002             | 45-900mm f/4 CSH=20.5mm 640x512x15µ Low Reflection Hard Carbon   |
| 680426-003             | 72-900mm f/4 CSH=20.5mm 1280x1024x10µ High Durability            |
| 680426-004             | 72-900mm f/4 CSH=20.5mm 1280x1024x10µ Low Reflection Hard Carbon |