SWIR Zoom Lenses

Data Sheet *26.5 to 265 mm, 33 to 330 mm & 53 to 530 mm*

Introduction

Beck Optronic Solutions offers a range of high-performance ruggedised zoom lenses based on a common chassis and sharing the same control electronics. Applications include, but are not limited to, long range surveillance, border security and remote weapon stations.

These lenses are designed to operate over the 700-1700 nm SWIR waveband of the latest InGaAs detectors, using aspheric lens design and special materials optimised for this spectrum. The systems are fully automated for remote control, are built to full Mil-SPEC and can be customised to meet specific requirements.

Specifications

Focal Length	26.5 mm to 265 mm	33 mm to 330 mm	53 mm to 530 mm
F/#	F/5.3	F/6.6	F/10.6
Image size	16.4 mm diagonal	20.5 mm diagonal	33.0 mm diagonal
Spectral correction	700 nm to 1,700 nm		
Field of view (horizontal)			
640 x 512 x 15 µm detector	20.5° to 2.1°	16.6° to 1.7°	10.3° to 1.0°
1280 x 1024 x 10 µm detector	27.0° to 2.8°	22.0° to 2.2°	13.5° to 1.4°
1280 x 1024 x 12.5 µm detector	Not applicable	27.0° to 2.8°	16.8° to 1.7°
Focus range	10 m to infinity		
Zoom speed	≤5 s 26.5 to 265 mm Increased at -15°C	≤5 s 33 to 330 mm Increased at -15°C	≤5 s 53 to 530 mm Increased at -15°C
Boresight retention	≤+/-0.1 mrad		
Operating temperature range	-20°C to +70°C		
Mass	1.9 kg		
Working voltage	12V DC nominal (7 V to 15V)		
Power requirements	0.5 A maximum		
Vibration	MIL-STD-810G, method 514.6, Procedure 1, Category 20		
Shock	Transportation: 3 shocks in each direction, 25 g, 6 ms		
Dimensions	254* x 98.5 x 86 mm	274* x 109 x 86 mm	327* x 109 x 86 mm
Camera mount	C Mount	C Mount or M42 x 1	M42 x 1
Control interface	RS-422/UART TTL/Pelco-D		

* To image plane

About Beck Optronic Solutions

Beck has a reputation for excellence in design and manufacture of precision optics that can be traced back over 175 years. Based near London, UK, Beck delivers complex, integrated electro-optic systems for defence and commercial use across the electromagnetic spectrum from UV to LWIR. **For pricing or further information please contact us at:**

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