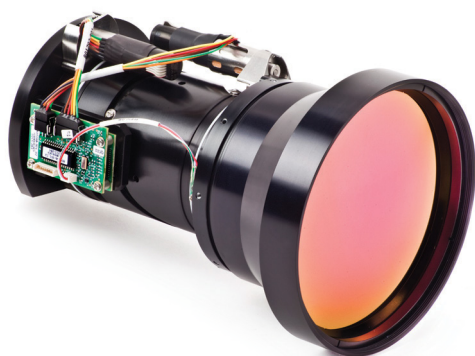


# SupIR 21-420mm f/4.0\*, Motorized Continuous Zoom 680160



**HD**  
FORMAT

WFOV (21mm)	
HFOV	640x512
15μ	25.1°
10μ	-

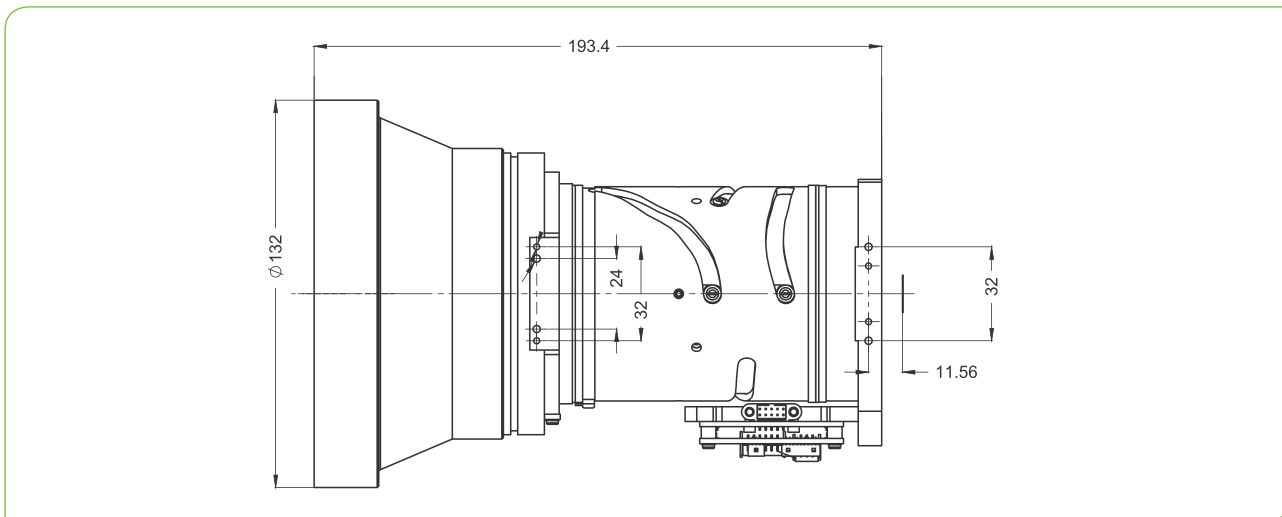
WFOV (33mm)	
HFOV	1280X1024
10μ	20.0°

NFOV (420mm)		
HFOV	640x512	1280X1024
15μ	1.3°	
10μ	-	1.7°

Property	Value	
<b>Optical</b>	<b>WFOV</b>	<b>NFOV</b>
Focal Length	21mm	420mm
F/#	4.0	
Cold Stop to FPA Distance	19.4mm/20.5mm**	
Cold Stop CA	Ø4.85mm	
Spectral Range	3.4-5.0μm	
Average Transmission (3.4-5.0μm)	86% (HD) / 82% (LRHC)	
Back Focal Length (Assuming 1.5mm Ge Window & Filter)	≥ 23.3mm in air	
Minimum Focus Range	10m	100m
Nuc (by defocus)	Yes	
<b>Mechanical</b>		
Focus Mechanism	Motorized	
Focus Time (minimum range to ∞)	≤1 sec. at maximum speed	
Zoom Mechanism	Motorized	
Zoom Time (NFOV to WFOV)	≤8 sec. at -32°C; ≤5 sec. at T≥20°C (at max speed)	
Through-Zoom Boresight	within a radius of 0.25mm at the focal plane along the full zoom range	
Weight	1.6kg	
Max. Dimensions	Ø132x200.5mm	
<b>Electrical</b>		
Lens Control	Designated lens controller	
Supply Voltage	12V	

\* For 10μm SXGA detectors, the EFL is 33-420mm

\*\* For config. 005/ 006/ 011/ 012



MWIR | ZOOM

Property		Value			
<b>Electrical</b>					
Current Consumption	0.5A average, 1.0A peak				
Communication Protocol	RS422				
<b>Environmental</b>					
Operating Temperature	-32°C to + 80°C				
Storage Temperature	-54°C to + 85 °C				
Sealing	IP 67 front element only				
Configurations	Description	FPA	Pixel Pitch	CSH	Coating
680160-001	33-420mm	1280x1024	10μ	19.4mm	High Durability
680160-003					Low Reflection Hard Carbon**
680160-002	21-420mm	640x512	15μ		High Durability
680160-004					Low Reflection Hard Carbon**
680160-005					High Durability
680160-006					Low Reflection Hard Carbon**
680160-011	33-420mm	1280x1024	10μ	20.5mm	High Durability
680160-012				Low Reflection Hard Carbon**	
680160-016	33-420mm	1280x1024	10μ	19.4mm	Hard Carbon Hydrophobic
680160-017					High Durability Hydrophobic
680160-018					High Durability Hydrophobic
680160-019					Low Reflection Hard Carbon Hydrophobic**

\* NOTE: The ICD drawing provided here is primarily a representation and may not accurately reflect the product's actual dimensions and specifications. For precise integration specifications contact your local sales representative.

\*\* For detailed LRHC coating specifications see page 13