# 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)

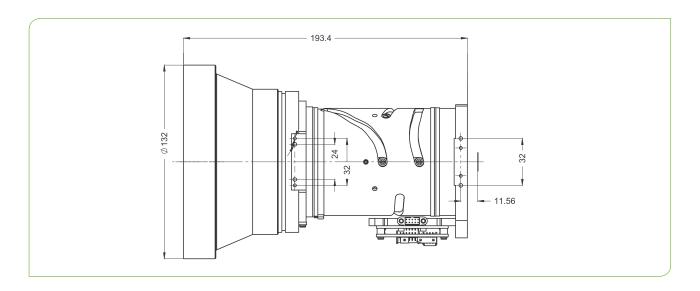
HFOV	640x512	1280X1024
15µ	1.3°	
10µ	-	1.7°

Property	Value			
Optical	WFOV	NFOV		
Focal Length	21mm	420mm		
F/#	4.0			
Cold Stop to FPA Distance	19.4mm/20.5mm**			
Cold Stop CA	Ø4.85mm	Ø4.85mm		
Spectral Range	3.4-5.0µm	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			
Mechanical				
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	within a radius of 0.25mm at the focal plane along the full zoom range		
Weight	1.6kg			
Max. Dimensions	Ø132x200.5mm			
Electrical				
Lens Control	Designated lens controller	Designated lens controller		
Supply Voltage	12V			
Current Consumption	0.5A average, 1.0A peak	0.5A average, 1.0A peak		
Communication Protocol	RS422	RS422		

 $<sup>^{\</sup>star}$  For 10µm SXGA detectors, the EFL is 33-420mm

<sup>\*\*</sup> For config. 005/ 006/ 011/ 012





Property		Value			
Environmental					
Operating Temperatu	-32°C to + 80°C				
Storage Temperature	Э	-54°C to + 85 °C			
Sealing		IP 67 front element only			
Configurations	Description	FPA	Pixel Pitch	CSH	Coating
680160-001					High Durability
680160-003		1280x1024	10μ	19.4mm -	Low Reflection Hard Carbon**
680160-018	33-420mm				High Durability Hydrophobic
680160-019					Low Reflection Hard Carbon Hydrophobic**
680160-021					Hard Carbon Hydrophobic
680160-002		-	640x512 15μ _		High Durability
680160-004					Low Reflection Hard Carbon**
680160-020	21-420mm	640x512			Hard Carbon Hydrophobic
680160-005				- 20.5mm	High Durability
680160-006					Low Reflection Hard Carbon**
680160-011			30x1024 10µ		High Durability
680160-012	00 400mm	1000/1004			Low Reflection Hard Carbon**
680160-016	— 33-420mm	1280X1024			Hard Carbon Hydrophobic
680160-017					High Durability Hydrophobic

<sup>\*\*</sup> For detailed LRHC coating specifications see page 13



<sup>\*</sup> 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.