

# Imaging Specifications

Detector	A325sc
Detector Type	Uncooled Microbolometer
Spectral Range	75 – 130 $\mu\text{m}$
Resolution	320 x 240
Detector Pitch	25 $\mu\text{m}$
NETD	<50 mK
<b>Electronics / Imaging</b>	
Time Constant	<12 ms
Frame Rate	60 Hz
Dynamic Range	14-bit
Digital Data Streaming	Gigabit Ethernet (60 Hz)
Command & Control	Gigabit Ethernet
<b>Measurement</b>	
Standard Temperature Range	-20°C to 120°C (-4°F to 248°F) 0°C to 350°C (32°F to 662°F)
Optional Temperature Range	Up to 2000°C (3632°F)
Accuracy	$\pm 2^\circ\text{C}$ or $\pm 2\%$ of Reading
<b>Optics</b>	
Camera f/#	f/1.3
Integrated Lens	18 mm (25°)
Available Lenses	76 mm (6°), 30 mm (15°), 10 mm (45°), 4 mm (90°)
Close-up Lenses / Microscopes	Close-up 25 $\mu\text{m}$ , 50 $\mu\text{m}$ , 100 $\mu\text{m}$
Focus	Automatic or Manual (Motorized)
<b>Image Presentation</b>	
Digital Data	Via PC Using ResearchIR Software
<b>General</b>	
Operating Temperature Range	-15°C to 50°C (5°F to 122°F)
Storage Temperature Range	-40°C to 70°C (-40°F to 158°F)
Encapsulation	IP 40 (IEC 60529)
Bump / Vibration	25 g (IEC 60068-2-29) / 2 g (IEC 60068-2-6)
Power	12/24 VDC, 24 W Absolute Max.
Weight w/Lens	0.7 kg (1.54 lb)
Size (L x W x H) w/Lens	170 x 70 x 70 mm (6.7 x 2.8 x 2.8 in)
Mounting	1/4"-20 (on three sides), 2 x M4 (on three sides)

System Overview	A655sc
Detector Type	Uncooled Microbolometer
Spectral Range	7.5 – 14.0 $\mu\text{m}$
Resolution	640 x 480
Detector Pitch	17 $\mu\text{m}$
NETD	<30 mK
<b>Imaging</b>	
Time Constant	<8 ms
Frame Rate (Full Window)	50 Hz
Subwindow Mode	User-Selectable 640 x 240 or 640 x 120
Maximum Frame Rate ( $\phi$ Min. Window)	200 Hz (640 x 120)
Dynamic Range	14-bit
Digital Data Streaming	Gigabit Ethernet (50/100/200 Hz) USB (25/50/100 Hz)
Command and Control	Gigabit Ethernet, USB
<b>Measurement</b>	
Standard Temperature Range	-40°C to 150°C (-40°F to 302°F) 100°C to 650°C (212°F to 1,202°F)
Optional Temperature Range	Up to 2,000°C (3,632°F)
Accuracy	$\pm 2^\circ\text{C}$ or $\pm 2\%$ of Reading
<b>Optics</b>	
Camera f/#	f/1.0
Available Lenses	6.5 mm (80°), 13.1 mm (45°), 24.6 mm (25°), 41.3 mm (15°), 88.9 mm (7°)
Focus	Automatic or Manual (Motorized)
Close-up / Microscopes	Close-up 25 $\mu\text{m}$ , 50 $\mu\text{m}$ , 100 $\mu\text{m}$
<b>Image Presentation</b>	
Digital Data	Via PC Using ResearchIR Software
<b>General</b>	
Operating Temperature Range	-15°C to +50°C (57°F to 363°F)
Storage Temperature Range	-40°C to 70°C (-40°F to 158°F)
Encapsulation	IP 30 (IEC 60529)
Bump / Vibration	25 g (IEC 60068-2-29) / 2 g (IEC 60068-2-6)
Power	12/24 VDC, 24 W Absolute Max.
Weight	0.9 kg (1.98 lb)
Size (L x W x H) w/o Lens	216 x 73 x 75 mm (8.5 x 2.9 x 3.0 in)
Mounting	1/4"-20 (on three sides), 2 x M4 (on three sides)