



General description	
The FLIR A615 camera has features and functions that make it the natural choice for anyone who uses PC software to solve problems and needs 640 x 480 pixel resolution. Among its main features are GigE Vision™ and GenICam™ compliance, which makes it plug-and-play when used with software packages such as IMAQ Vision and Halcon.	
Key features:	
<ul style="list-style-type: none"> Affordable GigE compliant GenICam compliant Trigg/synchronization/GPIO 16-bit 640 x 480 images @ 50 Hz, signal, temperature linear, and radiometric Windowing mode: 640 x 240 @ 100 Hz or 640 x 120 @ 200 Hz Compliant with any software that supports GenICam, including National Instruments IMAQ Vision and Stemmers Common Vision Blox Open and well described TCP/IP protocol for control and set-up 	
Typical applications:	
<ul style="list-style-type: none"> High-end infrared machine vision that needs temperature measurement Slag detection Food processing Electronics testing Power resistor testing Automotive 	
Imaging and optical data	
Field of view (FOV)	25° x 18.8°
Minimum focus distance	0.4 m (1.31 ft.)
Focal length	24.5 mm (0.96 in.)
Spatial resolution (IFOV)	0.69 mrad
Lens identification	Automatic
F-number	1.0
Thermal sensitivity/NETD	< 0.05°C @ +30°C (+86°F) / 50 mK
Image frequency	50 Hz (100/200 Hz with windowing)
Focus	Automatic or manual (built in motor)
Detector data	
Detector type	Focal Plane Array (FPA), uncooled microbolometer
Spectral range	7.5–13 µm
IR resolution	640 x 480 pixels
Detector pitch	17 µm
Detector time constant	Typical 8 ms
Measurement	
Object temperature range	-20 to +150°C (-4 to +302°F) 0 to +650°C (+32 to +1202°F) 300 to +2000°C (+572 to +3632°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading
Measurement analysis	
Atmospheric transmission correction	Automatic, based on inputs for distance, atmospheric temperature and relative humidity
Optics transmission correction	Automatic, based on signals from internal sensors
Emissivity correction	Variable from 0.01 to 1.0
Reflected apparent temperature correction	Automatic, based on input of reflected temperature
External optics/windows correction	Automatic, based on input of optics/window transmission and temperature
Measurement corrections	Global object parameters
USB	
USB	• Control and image
USB, standard	USB 2 HS

USB, connector type	• USB Mini-B
USB, communication	TCP/IP socket-based FLIR proprietary
USB, image streaming	16-bit 640 x 480 pixels @ 25 Hz 16-bit 640 x 240 pixels @ 50 Hz 16-bit 640 x 120 pixels @ 100 Hz - Signal linear - Temperature linear - Radiometric
USB, protocols	TCP, UDP, SNTP, RTSP, RTP, HTTP, ICMP, IGMP, ftp, SMTP, SMB (CIFS), DHCP, MDNS (Bonjour), uPnP
Ethernet	
Ethernet	Control and image
Ethernet, type	Gigabit Ethernet
Ethernet, standard	IEEE 802.3
Ethernet, connector type	RJ-45
Ethernet, communication	TCP/IP socket-based FLIR proprietary and GenICam protocol
Ethernet, image streaming	16-bit 640 x 480 pixels @ 50 Hz 16-bit 640 x 240 pixels @ 100 Hz 16-bit 640 x 120 pixels @ 200 Hz - Signal linear - Temperature linear - Radiometric GigE Vision and GenICam compatible
Ethernet, protocols	TCP, UDP, SNTP, RTSP, RTP, HTTP, ICMP, IGMP, ftp, SMTP, SMB (CIFS), DHCP, MDNS (Bonjour), uPnP
Digital input/output	
Digital input, purpose	Image tag (start, stop, general), Image flow ctrl. (Stream on/off), Input ext. device (programmatically read)
Digital input	2 opto-isolated, 10–30 VDC
Digital output, purpose	Output to ext. device (programmatically set)
Digital output	2 opto-isolated, 10–30 VDC, max 100 mA
Digital I/O, isolation voltage	500 VRMS
Digital I/O, supply voltage	12/24 VDC, max 200 mA
Digital I/O, connector type	6-pole jackable screw terminal
Power system	
External power operation	12/24 VDC, 24 W absolute max
External power, connector type	2-pole jackable screw terminal
Voltage	Allowed range 10–30 VDC
Environmental data	
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)
Humidity (operating and storage)	IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F)
EMC	<ul style="list-style-type: none"> EN 61000-6-2:2001 (Immunity) EN 61000-6-3:2001 (Emission) FCC 47 CFR Part 15 Class B (Emission)
Encapsulation	IP 30 (IEC 60529)
Bump	25 g (IEC 60068-2-29)
Vibration	2 g (IEC 60068-2-6)
Physical data	
Weight	0.7 kg (1.54 lb.)
Camera size (L x W x H)	216x 73 x 75 mm (8.5 x 2.9 x 3.0 in.)
Tripod mounting	UNC ¼"-20 (on three sides)
Base mounting	2 x M4 thread mounting holes (on three sides)
Housing material	Aluminium
Scope of delivery	
<ul style="list-style-type: none"> Hard transport case or cardboard box Infrared camera with lens Calibration certificate Ethernet™ cable Mains cable Power cable, pig-tailed Power supply Printed Getting Started Guide Printed Important Information Guide USB cable User documentation CD-ROM Utility CD-ROM Warranty extension card or Registration card 	

Optional Accessories

- 1910585 Power supply for A/SC3XX and A/SC6XX
 - 1910400 Power cord EU
 - 1910401 Power cord US
 - 1910402 Power cord UK
 - 1910423 USB cable Std A <-> Mini-B, 2 m/6.6 ft.
 - T951004 Ethernet cable CAT-6, 2m/6.6 ft.
 - 1910586 Power cable, pigtailed
 - 1196940 Hard transport case for A/SC3XX and A/SC6XX series
-

Optional Software

- T197038 ThermoVision™ System Developers Kit Ver. 2.6
-

Optional Accessories

1910585; Power supply for A/SC3XX and A/SC6XX



General description	
Power supply for the A320-series	
Technical data	
AC operation	100–240 V, 50–60 Hz, 1.8 A output: 12 VDC 3.0 A
Power	36 W
Size (L x W x H)	120 x 60 x 35 mm (4.7 x 2.4 x 1.4 in.)
Cable length	2.0 m (6.6 ft.)

v1.0

1910400; Power cord EU



General description	
Power cord (EU) for the power supply	
Technical data	
AC operation	250 V 16 A
Cable length	2.0 m (6.6 ft.)
Color	Black

v1.0

1910401; Power cord US



General description	
Power cord (US) for the power supply	
Technical data	
AC operation	125 V 15 A
Cable length	2.0 m (6.6 ft.)
Color	Black

v1.0

1910402; Power cord UK



General description	
Power cord (UK) for the power supply	
Technical data	
AC operation	250 V 13 A
Cable length	2.0 m (6.6 ft.)
Color	Black

v1.0

1910423; USB cable Std A <-> Mini-B, 2 m/6.6 ft.



General description	
This cable is used to connect the infrared camera with a computer, using the USB protocol.	
Technical data	
Weight	60 g (2.1 oz.)
Cable length	1.8 m (5.9 ft.)
Connector	Standard USB-A to USB Mini-B

v1.02

T951004; Ethernet cable CAT-6, 2m/6.6 ft.



General description	
This cable is used to connect the infrared camera to Ethernet.	
Technical data	
Weight	80 g (2.8 oz.)
Cable length	2.0 m (6.6 ft.)
Connector	RJ-45 to RJ-45
Cable type	CAT-6

v1.01

1910586; Power cable, pigtailed



General description	
This cable is used, when a separate power supply is used (not the one supplied with the camera)	
Technical data	
Weight	75 g (2.6 oz.)
Cable length	2.0 m (6.6 ft.)
Connector	Pigtailed
Color	Black

v1.02

1196940; Hard transport case for A/SC3XX and A/SC6XX series



General description	
Hard transport case for FLIR A3XX series	

v1.0

Optional Software

T197038; ThermoVision™ System Developers Kit Ver. 2.6



General description

ThermoVision™ System Developers Kit

Release notes

Version 2.6

v1.0
