

Metadata

Part No. Product name Revision	73309-0102 FLIR A35 f=9 mm with SC kit 47931	83207-0102 FLIR A35 FOV 45 (60 Hz, ver. 2017) 47934	83209-0102 FLIR A35 FOV 69 (30 Hz, ver. 2017) 47942	83213-0102 FLIR A35 FOV 25 (60 Hz, ver. 2017) 47933	83225-0101 FLIR A35 FOV 13 (60 Hz, ver. 2017) 47932	83250-0101 FLIR A35 FOV 6.5 (60 Hz, ver. 2017) 47935
Last modified	2018-03-06	2018-03-06	2018-03-06	2018-03-06	2018-03-06	2018-03-06
Imaging and	l optical data					
IR resolution Thermal sensitivity/NETD Field of view (FOV)	320 × 256 pixels < 0.05°C @ +30°C (+86°F) / 50 mK 48° × 39°	320 × 256 pixels < 0.05°C @ +30°C (+86°F) / 50 mK 45° × 35°	320 × 256 pixels < 0.05°C @ +30°C (+86°F) / 50 mK 69° × 56°	320 × 256 pixels < 0.05°C @ +30°C (+86°F) / 50 mK 25° × 19°	320 × 256 pixels < 0.05°C @ +30°C (+86°F) / 50 mK 13° × 10°	320 × 256 pixels < 0.05°C @ +30°C (+86°F) / 50 mK 6.5° × 5°
Minimum focus distance	3.2 cm (1.6 in.)	2.5 cm (0.98 in.)	3.2 cm (1.6 in.)	7.6 cm (3.0 in.)	30 cm (12 in.)	1.5 m (59 in.)
Focal length Spatial resolution (IFOV)	9 mm (0.35 in.) 2.78 mrad	7.5 mm (0.30 in.) 2.267 mrad	9 mm (0.35 in.) 3.8 mrad	13 mm (0.51 in.) 1.308 mrad	25 mm (0.98 in.) 0.680 mrad	50 mm (1.97 in.) 0.340 mrad
F-number	1.25	1.4	1.4	1.25	1.1	1.2
Image frequency	60 Hz	60 Hz	30 Hz	60 Hz	60 Hz	60 Hz
Focus	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Detector dat	a					
Detector type	Focal plane array (FPA), uncooled VOX microbolometer					
Spectral range	7.5–13 μm	7.5–13 µm	7.5–13 μm	7.5–13 μm	7.5–13 μm	7.5–13 μm
Detector pitch Detector time constant	25 µm Typical 12 ms	17 µm Typical 12 ms	34 µm Typical 12 ms	17 µm Typical 12 ms	17 µm Typical 12 ms	17 μm Typical 12 ms
Measuremer	nt					
Object temperature range	 -25 to +135°C (- 13 to 275°F) -40 to +550°C (- 40 to +1022°F) 	 -25 to +100°C (- 13 to 212°F) -40 to +550°C (- 40 to +1022°F) 	 -25 to +135°C (- 13 to 275°F) -40 to +550°C (- 40 to +1022°F) 	 -25 to +100°C (- 13 to 212°F) -40 to +550°C (- 40 to +1022°F) 	 -25 to +100°C (- 13 to 212°F) -40 to +550°C (- 40 to +1022°F) 	 -25 to +100°C (- 13 to 212°F) -40 to +550°C (- 40 to +1022°F)
Accuracy	$\pm 5^{\circ}$ C ($\pm 9^{\circ}$ F) or $\pm 5\%$ of reading	$\pm 5^{\circ}$ C ($\pm 9^{\circ}$ F) or $\pm 5\%$ of reading	$\pm 5^{\circ}$ C ($\pm 9^{\circ}$ F) or $\pm 5\%$ of reading	$\pm 5^{\circ}$ C ($\pm 9^{\circ}$ F) or $\pm 5\%$ of reading	$\pm 5^{\circ}$ C ($\pm 9^{\circ}$ F) or $\pm 5\%$ of reading	$\pm 5^{\circ}$ C ($\pm 9^{\circ}$ F) or $\pm 5\%$ of reading
Measuremer	nt 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 0.5 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					
Ethernet						
Ethernet	Control and image					
Ethernet, type Ethernet, standard	Gigabit Ethernet IEEE 802.3					
Ethernet,	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45

connector type GigE Vision ver. 1.2 GigE Vision ver. 1.2 GigE Vision ver. 1.2 GigE Vision ver. 1.2 Ethernet, GigE Vision ver. 1.2 GigE Vision ver. 1.2 Client API GenICam Client API GenICam Client API GenICam communication Client API GenICam Client API GenICam Client API GenICam compliant compliant compliant compliant compliant compliant Ethernet, image 8-bit monochrome @ 60 8-bit monochrome @ 60 8-bit monochrome @ 30 8-bit monochrome @ 60 8-bit monochrome @ 60 8-bit monochrome @ 60 streaming Hz Hz Hz Ηz Hz Hz Signal linear/ Signal linear/ Signal linear/ Signal linear/ Signal linear/ Signal linear/ ٠ ٠ ٠ DDE DDE DDE DDE DDE DDE Automatic/ • Automatic/ Automatic/ Automatic/ Automatic/ Automatic/ ٠ Manual Manual Manual Manual Manual Manual • Flip H&V Flip H&V Flip H&V Flip H&V • Flip H&V Flip H&V • • 14-bit 320 × 256 pixels 14-bit 320 \times 256 pixels 14-bit 320 × 256 pixels 14-bit 320 × 256 pixels 14-bit 370 × 296 pixels 14-bit 320 × 256 pixels @ 60 Hz @ 60 Hz @ 30 Hz @ 60 Hz @ 60 Hz @ 60 Hz Signal linear/ Signal linear/ Signal linear/ Signal linear/ Signal linear/ Signal linear/ DDE DDF DDE DDE DDE DDE Temperature Temperature Temperature Temperature Temperature Temperature linear linear linear linear linear linear GigE Vision and GenICam compatible GenICam compatible GenICam compatible GenICam compatible GenICam compatible GenICam compatible Ethernet, power Power over Ethernet, PoE IEEE 802.3af class 0 POE IEEE 802.3af clas Power Power Power Power Power Power TCP, UDP, ICMP, IGMP, Ethernet, protocols DHCP, GigEVision DHCP, GigEVision DHCP, GigEVision DHCP, GigEVision DHCP, GigEVision DHCP, GigEVision

Digital input/output

5						
Digital input, purpose	General purpose					
Digital input	1× opto-isolated, "0" <1.2 VDC, "1" = 2-25 VDC.					
Digital output, purpose	General purpose output to ext. device (programmatically set)					
Digital output	1× opto-isolated, 2–40 VDC, max. 185 mA	1× opto-isolated, 2–40 VDC, max. 185 mA				
Digital I/O, isolation voltage	500 VRMS					
Digital I/O, supply voltage	2–40 VDC, max. 200 mA					
Digital I/O, connector type	12-pole M12 connector (shared with Digital synchronization and External power)					
Synchronization in, purpose	Frame synchronization in to control camera	Frame synchronization in to control camera				
Synchronization in	$1 \times$, non-isolated					
Synchronization in, type	LVC Buffer @3.3V, "0" <0.8 V, "1">2.0 V.					
Synchronization out, purpose	Frame synchronization out to control another FLIR Ax5 camera					
Synchronization out	1×, non-isolated	1×, non-isolated	$1 \times$, non-isolated	$1 \times$, non-isolated	1×, non-isolated	$1 \times$, non-isolated
Synchronization out, type	LVC Buffer @ 3.3V, "0"=24 MA max, "1"= - 24 mA max.	LVC Buffer @ 3.3V, "0"=24 MA max, "1"= - 24 mA max.	LVC Buffer @ 3.3V, "0"=24 MA max, "1"= - 24 mA max.	LVC Buffer @ 3.3V, "0"=24 MA max, "1"= - 24 mA max.	LVC Buffer @ 3.3V, "0"=24 MA max, "1"= - 24 mA max.	LVC Buffer @ 3.3V, "0"=24 MA max, "1"= - 24 mA max.
Digital synchronization, connector type	12-pole M12 connector (shared with Digital I/O and External power)	12-pole M12 connector (shared with Digital I/O and External power)	12-pole M12 connector (shared with Digital I/O and External power)	12-pole M12 connector (shared with Digital I/O and External power)	12-pole M12 connector (shared with Digital I/O and External power)	12-pole M12 connector (shared with Digital I/O and External power)
Power syste	m					
External power operation	12/24 VDC, < 3.5 W nominal < 6.0 W absolute max.	12/24 VDC, < 3.5 W nominal < 6.0 W absolute max.	12/24 VDC, < 3.5 W nominal < 6.0 W absolute max.	12/24 VDC, < 3.5 W nominal < 6.0 W absolute max.	12/24 VDC, < 3.5 W nominal < 6.0 W absolute max.	12/24 VDC, < 3.5 W nominal < 6.0 W absolute max.
External power, connector type	12-pole M12 connector (shared with Digital I/O and Digital Synchronization)	12-pole M12 connector (shared with Digital I/O and Digital Synchronization)	12-pole M12 connector (shared with Digital I/O and Digital Synchronization)	12-pole M12 connector (shared with Digital I/O and Digital Synchronization)	12-pole M12 connector (shared with Digital I/O and Digital Synchronization)	12-pole M12 connector (shared with Digital I/O and Digital Synchronization)
Voltage	Allowed range 10-30 VDC	Allowed range 10–30 VDC	Allowed range 10-30 VDC	Allowed range 10-30 VDC	Allowed range 10–30 VDC	Allowed range 10–30 VDC
Environmen	tal data					
Operating temperature range	-15°C to +50°C (+5°F to +122°F) The operating temperature range assumes that the camera is mounted on the base support (included in the	-15°C to +60°C (+5°F to +140°F) The operating temperature range assumes that the camera is mounted on the base support (included in the	-15°C to +60°C (+5°F to +140°F) The operating temperature range assumes that the camera is mounted on the base support (included in the	-15°C to +60°C (+5°F to +140°F) The operating temperature range assumes that the camera is mounted on the base support (included in the	-15°C to +60°C (+5°F to +140°F) The operating temperature range assumes that the camera is mounted on the base support (included in the	-15°C to +60°C (+5°F to +140°F) The operating temperature range assumes that the camera is mounted on the base support (included in the

	package) or a similar type of heatsink.	package) or a similar type of heatsink.	package) or a similar type of heatsink.	package) or a similar type of heatsink.	package) or a similar type of heatsink.	package) or a similar type of heatsink.
Storage temperature	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)
range Humidity (operating and storage)	IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F)	IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F)	IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F)	IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F)	IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F)	IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F)
EMC	 EN 61000-6-2 (Immunity) EN 61000-6-3 (Emission) FCC 47 CFR Part 15 Class B (Emission) 	 EN 61000-6-2 (Immunity) EN 61000-6-3 (Emission) FCC 47 CFR Part 15 Class B (Emission) 	 EN 61000-6-2 (Immunity) EN 61000-6-3 (Emission) FCC 47 CFR Part 15 Class B (Emission) 	 EN 61000-6-2 (Immunity) EN 61000-6-3 (Emission) FCC 47 CFR Part 15 Class B (Emission) 	 EN 61000-6-2 (Immunity) EN 61000-6-3 (Emission) FCC 47 CFR Part 15 Class B (Emission) 	 EN 61000-6-2 (Immunity) EN 61000-6-3 (Emission) FCC 47 CFR Part 15 Class B (Emission)
Encapsulation	IP 40 (IEC 60529) with base support mounted	IP 40 (IEC 60529) with base support mounted	IP 40 (IEC 60529) with base support mounted	IP 40 (IEC 60529) with base support mounted	IP 40 (IEC 60529) with base support mounted	IP 40 (IEC 60529) with base support mounted
Shock Vibration	25 g (IEC 60068-2-27) 2 g (IEC 60068-2-6)	25 g (IEC 60068-2-27) 2 g (IEC60068-2-6) and MIL-STD810G				
Physical data	а					
Weight	0.200 kg (0.44 lb.)	-	-	-	-	-
Camera size (L × W × H)	106 × 40 × 43 mm (4.2 × 1.6 × 1.7 in.)	$104.1 \times 49.6 \times 46.6$ mm (4.1 × 1.9 × 1.8 in.)	$104.1 \times 49.6 \times 46.6$ mm (4.1 × 1.9 × 1.8 in.)	$104.1 \times 49.6 \times 46.6$ mm (4.1 × 1.9 × 1.8 in.)	$107.8 \times 49.6 \times 46.6$ mm (4.2 × 1.9 × 1.8 in.)	$141.1 \times 58.4 \times 58.4$ mm (5.7 × 2.3 × 2.3 in.)
Tripod mounting	1 \times UNC ¼"-20 (with Base support accessory, included in the delivery box)	$1 \times$ UNC $1{\!\!\!/} {}^{\prime\prime}{}^{-20}$ (with Base support accessory, included in the delivery box)	$1 \times$ UNC $1{\!\!\!/} ^{\prime\prime}\mbox{-}20$ (with Base support accessory, included in the delivery box)	$1 \times$ UNC $1{\!\!\!/} ^{\prime\prime}\mbox{-}20$ (with Base support accessory, included in the delivery box)	$1 \times$ UNC $1\!\!\!/4"\mathchar`-20 (with Base support accessory, included in the delivery box)$	$1 \times$ UNC $^{1\!\!/}$ "-20 (with Base support accessory, included in the delivery box)
Base mounting	$4 \times M3$ thread mounting holes (bottom)	$4 \times M3$ thread mounting holes (bottom)	$4 \times M3$ thread mounting holes (bottom)	$4 \times M3$ thread mounting holes (bottom)	$4 \times M3$ thread mounting holes (bottom)	$4 \times M3$ thread mounting holes (bottom)
Housing material	Magnesium and aluminum	Magnesium and aluminum	Magnesium and aluminum	Magnesium and aluminum	Magnesium and aluminum	Magnesium and aluminum
Shipping info	ormation					
Packaging, type List of contents	Cardboard box • Hard transport case • Infrared camera with lens • Base support • Cable tie (2 ea.) • Ethernet cable CAT-6, 2m/6.6 ft (2 ea.) • FLIR ResearchIR Standard 4 • Focus adjustment tool • Gooseneck • Mains cable kit (UK,EU,US) • PoE Injector (power over Ethernet) • Printed documentation • Table stand	Cardboard box • Infrared camera with lens • Base support • Focus adjustment tool • Printed documentation	Cardboard box • Infrared camera with lens • Base support • Focus adjustment tool • Printed documentation	Cardboard box • Infrared camera with lens • Base support • Focus adjustment tool • Printed documentation	Cardboard box • Infrared camera with lens • Base support • Printed documentation	Cardboard box • Infrared camera with lens • Base support • Printed documentation
Packaging, weight		-	-	-	-	-
Packaging, size	370 × 180 × 320 mm (14.6 × 7.1 × 12.6 in.)	-	-	-	-	-
EAN-13	7332558010570	7332558013120	7332558013106	7332558013090	7332558013113	7332558014431
UPC-12	845188011246	845188014865	845188014889	845188014858	845188014872	845188016494
Country of origin	Sweden	Sweden	Sweden	Sweden	Sweden	Sweden