

FLIR AXXX-SERIES SMART SENSOR

Fixed-Mount Thermal Camera



SPECIFICATIONS

Detector Data	Standard Configuration	Advanced Configuration	
IR resolution	0		
	320 × 240 (A400), 464 × 348 (A500), or 640 × 480 (A700)		
Visual resolution	1280 × 960		
Focal plane array/spectral range	<30 mK to <50 mK, lens dependent		
Lenses	2x Macro, DFOV (24°/14°), 6°, 14°, 24°, and 42°		
IR camera focus	One-shot contrast, motorized, manual		
Measurement			
Object temperatures	-20°C to 120°C (-4°F to 248°F) 0°C to 650°C (32°F to 1202°F) A400/A500: 300°C to 1500°C (572°F to 2732°F) A700: 300°C to 2000°C (572°F to 3632°F)		
Accuracy	±2°C (±3.6°F) or ±2% of reading		
Measurement analysis			
Standard functions	10 spotmeters, 10 boxes, 3 Deltas, 1 isotherm, 1 iso-coverage, 1 reference temperature	10 spotmeters, 10 boxes & mask polygons, 3 Deltas, 2 isotherm, 2 iso-coverage, 1 reference temperature, 2 lines, 1 polyline	
Automatic hot/cold detection	Max./min. temperature value and position shown within box		
Scheduled response	SFTP (image), SMTP (image and/or measurement data/result)		
Measurement frequency	Up to 10 Hz		
Measurement result read-out	Yes; common protocols include EtherNet/IP, Modbus TCP, MQTT, and REST API		
Dynamic Range	16-bit		

Key Features:

- On-camera temperature measurement and alarming tools provide immediate results
- Unrivaled connectivity and on-the-edge computing for easy integration into web applications
- Robust and reliable thermal imaging for applications where temperature accuracy matters

Main Applications:

- Continuous thermal monitoring of critical infrastructure
- Early fire detection for faster response
- Temperature-based machine and process control

www.flir.com/axxx-series-smart-sensor

Alarm	Standard Configuration	Advanced Configuration
Alarm function	On any selected measurement function; digital in; internal camera temperature	
Alarm output	Yes: common output includes e-mail, EtherNet/IP, Modbus TCP, RESTful API, and ONVIF (advanced only)	
Video streaming, RTSP	protocol	
Unicast	Yes	
Multicast	Yes	
Multiple image streams	Yes	
RTSP protocol - video s	stream 0	
Source	Visual, IR, MSX®	
Contrast enhancement	FSX®, histogram equalization (IR only)	
Overlay	With, without	
Pixel format	YUV411	
Encoding	H.264/MPEG4/MJPEG	
RTSP protocol - video s	stream 1	
Source	Visual	
Overlay	No	
Pixel format	YUV411	
Encoding	H.264/MPEG4/MJPEG	
Radiometric streaming		
Source	-	IR
Pixel format	-	M0N0 16
Encoding	-	Compressed JPEG-LS; FLIR radiometric

For more information contact: Sales@TeledyneFLIR.com or to find your local support number, visit: flir.com/contactsupport www.teledyneflir.com

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SPECIFICATIONS, CONT.

Ethernet	Standard Configuration	Advanced Configuration		
Interface	Wired; Wi-Fi*			
Connector types	M12 8-pin X-coded, female; RP-SMA, female			
Ethernet type & standard	1000 Mbps, IEEE 802.3			
Ethernet power	Power over Ethernet, PoE IEEE 802.3af class 3			
Ethernet protocols	Include EtherNet/IP, Modbus TCP, and MQTT			
Digital input/output				
Connector type	M12 Male 12-pin A-coded (shared with ext. power)			
Digital input	2× opto-isolated, Vin (low) = 0-1.5 V, Vin (high) = 3-25 V			
Digital output	$3\times$ opto-isolated, 0–48 V DC, max. 350 mA (derated to 200 mA at 60°C). Solid-state opto relay, $1\times$ dedicated as fault output (NC)			
Power system				
Connector type	M12 Male 12-pin A-coded (shared with Digital I/O)			
Power consumption	7.5 W at 24 V DC typical; 7.8 W at 48 V DC typical; 8.1 W at 48 V PoE typical			
Wi-Fi*				
Connector type	Female RP-SMA			

The FLIR A-Series cameras are designed for configuration to your specific needs. Specifications are subject to change without notice. For the most up-to-date specifications, visit: flir.com/axxx-series

