

Overview

The K9 is a compact uncooled microbolometer module for fixed condition-monitoring installations. It streams a calibrated 16-bit radiometric frame over Ethernet and exposes per-pixel temperature without a host-side calibration step.

Key specifications

Detector type	Uncooled VOx
Resolution	640 x 512
Pixel pitch	12 microns
Spectral band	8 to 14 microns
Frame rate	30 Hz
Thermal sensitivity, NETD	Under 40 mK
Measurement range	-20 C to +550 C
Accuracy	Greater of 2 C or 2 percent
Output	GigE Vision, 16-bit radiome

Electrical and environmental

Power

Supply voltage	12 to 30 V DC
Typical consumption	3.1 W at 24 V
Peak consumption at cold start	6.4 W
Power over Ethernet	802.3af Class 2

Environment

Operating temperature	-40 C to +70 C
Storage temperature	-50 C to +85 C
Humidity	5 to 95 percent non-condensing
Ingress protection	IP67 with sealed connector
Vibration	5 g, 10 to 500 Hz
Shock	25 g, 11 ms half-sine

Compliance

CE, UKCA, FCC Part 15 Class A, RoHS 3. Export classification 6A003.b.4.b applies in some territories. Confirm licensing before shipment outside the customer country.

Mechanical and ordering

Mechanical

Body dimensions	86 x 54 x 48 mm
Mass without lens	310 g
Mounting	Four M4 on 40 mm centres
Lens interface	M34 x 0.5 thread
Connector	M12 X-coded, 8 pin

Order codes

AX-K9-TH-13	13 mm lens, 45 degree field
AX-K9-TH-19	19 mm lens, 32 degree field
AX-K9-TH-25	25 mm lens, 24 degree field
AX-K9-BR-01	Pole bracket, stainless
AX-K9-CAL-3	Three-point calibration serv

Warranty

Thirty-six months from date of despatch. Calibration certificate valid twelve months.
Recalibration is available at any Axion service centre with five working day turnaround.