

armstrong optical

Thermal Camera IR210

By using an uncooled microbolometer array as its high-resolution sensor the IR210 Thermal Camera allows easy detection of objects in complete darkness and without the requirement of external illumination.

The special waterproof design and small size ensures the facile integration of the IR210 into, for instance, existing outdoor CCTV security systems to enable detection of intruders even on the darkest nights with no active illumination or artificial lighting.

With a choice of standard lenses ranging from 19mm f/0.7 right through to 150mm f/1.0 the IR210 can be tailored to most surveillance applications and is becoming the sensor of choice for infrared interferometry at 10.6 μm .



Versatile & portable

- The compact and portable design makes it perfectly suited to either mobile or fixed, day or night detection and surveillance.

Crisp & sharp imaging

- With a thermal sensitivity of 80mK, the camera is able to detect and capture extremely small temperature differences in high-resolution, crisp 16-bit thermal images. Automatic non-uniformity calibration at regular intervals keeps image noise-free even after extended operation.

Plug-and-play compatibility

- Standard video, power and serial communication interfaces enable the camera to work with standard video displays, external power supplies and remote control keyboards. There is no need to invest in a different infrastructure.

License free & rapid delivery

- Since the system Utilises a European microbolometer FPA detector, the camera is without export or import license restriction, which significantly improves delivery time to our customers.



System Specification

Detector type:	Uncooled FPA microbolometer 384x288 pixel
Spectral range:	8 - 14 μm
Field of view:	43 x 33 degrees (with standard 19mm f/0.7 lens)
Thermal sensitivity:	0.08$^{\circ}\text{C}$ at 30$^{\circ}\text{C}$
Start-up time:	<30sec
Gain & offset:	Auto or manual control
Electronic zoom:	x2, x4 interpolating
Contrast/brightness:	Auto or manual control
Control Interface:	RS232/RS485

Image presentation

Video output:	PAL/NTSC (PAL/NTSC to USB2.0 option)
Image colour:	B&W, W&B, multiple colours (9 palettes available)

Power system

Voltage requirement:	7 – 9 V DC
Power consumption:	3.5W typical

Environmental specification

Operating temperature:	-20 to +50$^{\circ}\text{C}$
Storage temperature:	-40 to +60$^{\circ}\text{C}$
Humidity:	Operation & storage 10-95%, non-condensing

Physical characteristics

Weight:	220gm
Dimensions:	120 x 60 x 60mm (without lens)
Tripod mount:	1/4" – 20

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