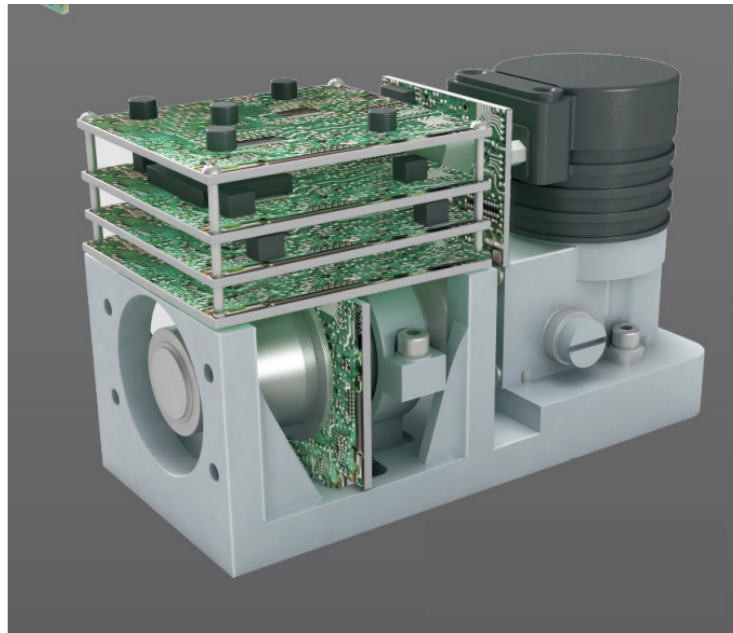


armstrong optical

IR131/133 cooled MWIR sensor modules



The **IR131/133** sensor modules have been designed around a 320x256 (30 μ m) pixel cooled MCT array operating in the 3-5 μ m waveband with the OEM system manufacturer in mind.

The small size, light weight, low power consumption and standard interfacing of the modules makes them ideal for incorporation into a wide range of thermal imaging systems for applications such as research & development, fixed platform targeting & surveillance stations.

Detector:

Detector type	cooled MCT FPA
Spectral range	3 - 5 μ m
Sensor size	320x256 pixels (30 μ m)
NETD	\leq 15mK – IR131 \leq 8mK – IR133
Time from start-up	<7min (Stirling cooler)
Fill factor	>90%
Bad pixels	<2%

Image:

Video output	PAL (IR131) PAL/NTSC (IR133)
Frame rate	50Hz (IR131) 50/60Hz (IR133)
Adjustments	Auto/manual brightness & contrast
Electronic zoom	X2
Polarity	B&W, B&W inverse

Interfaces:

Command/control	RS232/422
Video output	RCA/BNC

Power supply:

Power requirement	110/220VAC
Power consumption	\leq 20W during cooling \leq 15W when stable

Physical:

Weight	1kg (131), <0.9kg (133)
Size	158 x 72 x 91mm – IR131 143 x 65 x 90mm – IR133

Environmental specification:

Operating temperature	-20 $^{\circ}$ C to +50 $^{\circ}$ C
Storage temperature	-20 $^{\circ}$ C to +50 $^{\circ}$ C