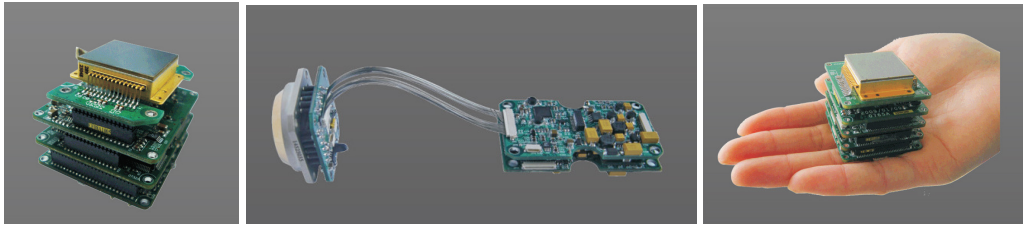


armstrong optical

IR113/116/118/118S Uncooled Sensor Modules



The **IR113** and **IR116** sensor modules have been designed around a 384x288 (25 μ m) pixel array operating in the 8-12 μ m waveband with the OEM system manufacturer in mind.

The **IR118/118S** sensor modules utilise a 384x288 (25 μ m) pixel array with a superior thermal sensitivity.

The small size, light weight, low power consumption and standard interfacing of the modules make them ideal for incorporation into a wide range of thermal imaging systems for applications as varied as handheld security devices to fixed platform targeting & surveillance stations.

Detector:

Detector type	Uncooled FPA
Spectral range	8 - 12 μ m
Sensor size	384x288 pixels (25 μ m)
NETD	\leq 100mK – IR113/116 \leq 60mK – IR118
Thermal response	7ms
Fill factor	$>$ 80%
Bad pixels	$<$ 1%

Image:

Video output	PAL
Frame rate	50Hz
Adjustments	Auto/manual brightness & contrast
Electronic zoom	X2 (113/6/8/8S), x4 (113)
Polarity	B&W, B&W inverse (colour option)
Video recording	118S only
Storage media	118S – SD card (to 8Gb)

Interfaces:

Command/control	RS232/422/485
USB2.0 (118S only)	image transfer
Video output	RCA/BNC

Power supply:

Power requirement	9V AC
Power consumption	\leq 3 – 3.5W

Physical:

Weight	90gm (113/116), 70gm (118/118S)
Size	47 x 42 x 44mm – IR113 65 x 38 x 19mm – IR116 39 x 39 x 44mm – IR118/118S

Environmental specification:

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