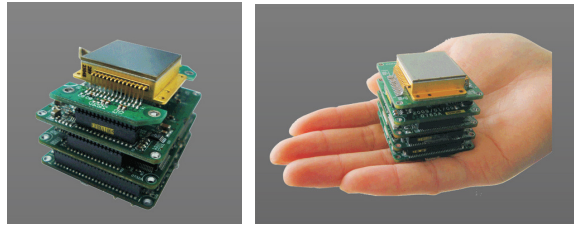


# armstrong optical

## IR113/118/118S Uncooled Sensor Modules



The **IR113** and **IR118** sensor modules have been designed around a 384x288 (25 $\mu$ m) pixel array operating in the 8-12 $\mu$ m waveband with the OEM system manufacturer in mind.

The **IR118/118S** sensor modules utilise a 384x288 (25 $\mu$ 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 $\mu$ m
Sensor size	384x288 pixels (25 $\mu$ m)
NETD	$\leq$ 80mK – IR113 $\leq$ 60mK – IR118/118S
Thermal response	7ms
Fill factor	$>$ 80%
Bad pixels	$<$ 1%

### Image:

Video output	PAL/NTSC
Frame rate	50/60Hz
Adjustments	Auto/manual brightness & contrast
Electronic zoom	X2 (118/8S), x2,x4 (113)
Polarity	B&W, B&W inverse (colour option)
Video recording	118S only
Storage media	118S – SD card (to 4Gb)

### Interfaces:

Command/control	RS232/422 (+RS485 – 118)
USB2.0 (118S only)	image transfer to PC
Video output	RCA/BNC

### Power supply:

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

### Physical:

Weight	90gm (113), 70gm (118/118S)
Size	47 x 42 x 44mm – IR113 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