

# armstrong optical

## 640x480 Uncooled IR Module

### Thermore 640

#### Detector

Type	Uncooled $\alpha$ -Si focal plane array
Array size	640 x 480 pixels
Pixel pitch	25 $\mu$ m
Spectral response	8~14 $\mu$ m
Response time	$\leq$ 20s
NETD	Dependent upon lens, target of <75mK
MRTD	Dependent upon lens

#### Power requirement

Power supply	9V $\pm$ 2V DC
Power dissipation	<4W(at 25 $^{\circ}$ C)

#### Environmental

Operating temperature	-20~+60 $^{\circ}$ C (-40~60 $^{\circ}$ C optional )
Storage temperature	/-40~+60 $^{\circ}$ C

#### Image Performance

Display	Black/white and reverse
Cursor	Hide/display, removable
Gain & Offset	auto and manual
Electronic Zoom	X2, X4
Video Output	PAL, S-video
Frame frequency	50Hz
Adjust	Manual/Auto/Semi Auto brightness & contrast adjustment

#### Image processing

Enhancement, smoothing, mirror/rotate image

#### Interfaces

Remote Control	RS232/ RS422 (RS485 optional)
Command and control	RS232/ RS422 (RS485 optional)
Video output	RCA or BNC