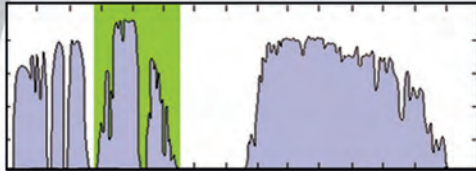




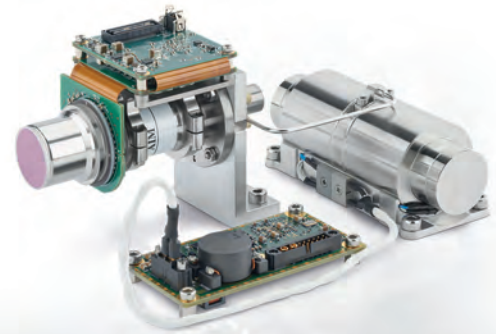
AIM

HiPIR-1024M - MCT MWIR 1024 x 768 10 μ m PITCH IDCA

HIGH PERFORMANCE XGA MWIR-MODULES

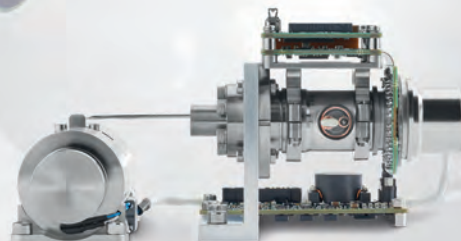


- XGA resolution in a compact configuration
- Same configuration for MWIR and LWIR modules available
- Various cooler options available



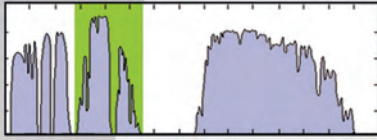
High resolution, crisp and clear XGA format images at up to 120Hz full frame rates. The integrated command and control electronics delivers 14bit resolution digital video data and provides a comprehensive system programming interface.

Whether minimum vibration output and maximum lifetime, or compactness and low power consumption are key requirements, all AIM detectors can be integrated with AIM long lifetime split linear coolers, or with different integral rotary coolers.



HiPIR-1024M - MCT MWIR 1024 x 768 10µm PITCH IDCA

HIGH PERFORMANCE XGA MWIR-MODULES



IR Sensor

Material	HgCdTe - Cadmium Mercury Telluride
Format	1024 x 768
Pixel pitch	10µm x 10µm
Detector spectral response	3.4µm - 5µm

ROIC

Technology	Si-CMOS
Input	Direct charge injection
Operating mode	Snapshot
Readout modes	selectable ITR / IWR
Windowing	programmable (any window in steps of 8 columns and 1 row)
Charge handling capacity	~ 6.7Me ⁻ (ITR); ~ 6.5Me ⁻ (IWR)

Command & Control Electronics

Type	CCE8K-LP
Output video	CL LVDS 16bit (14bit ADC)
Input supply / control / synchronization	5VDC / CL LVDS, UART LVTTTL / Internal, external frame sync
Power consumption	~ 2.5W
Max. data rate	up to 80MHz
Max. full frame rate	up to 100Hz

Dewar / Cooler

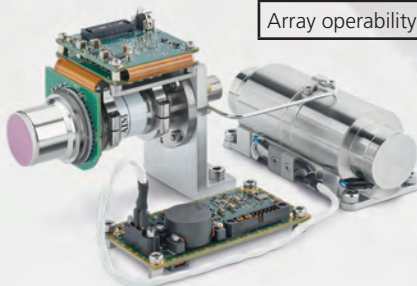
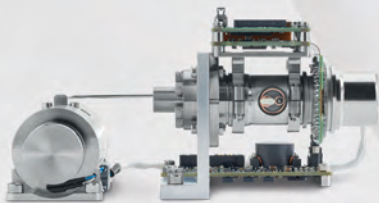
Cooler	SX040	K561	K508
Cooler type	Split Linear	Integral Rotary	Integral Rotary
Cooler electronics	external digital µDCE50	external analog	internal
FPA operating temperature	~ 95K	~ 95K	~ 95K
Cool down time*	4min	4min	4min
Cooler power consumption*	6W	3.5W	5W
MTTF cooler**	> 25,000h	> 8,000h	> 10,000h
Cold shield	F/2.0, F/4.0 standard, others on request		
Total weight IDCA	1.0kg	0.4kg	0.6kg

* at ambient room temperature

** will depend on usage profile

Performance

NETD (300K; half well)	~ 18mK
IETD	< 0.5 x NETD
Array operability	> 99.5%



AIM Infrarot-Module GmbH
 Theresienstraße 2
 74072 Heilbronn/Germany
 Tel.: +49 7131 6212 -0
 info@aim-ir.com
 www.aim-ir.com