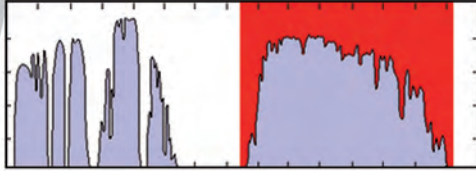




HiPIR-HD720L - MCT LWIR 1280 x 720 12 μ m PITCH IDCA

HIGH PERFORMANCE HD LWIR-MODULES



- High resolution in a compact configuration
- Same configuration for MWIR and LWIR modules available
- Various cooler options available
- Best suited for applications requiring 16:9 HD format:
vehicle platforms, rotorcraft pilotage, surveillance



The HiPIR-HD720L offers ultimate high resolution true HD 16:9 format IR-imaging at 75Hz full frame rate. 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. The powerful and durable AIM SX095 long-life linear Stirling cooler presents a perfect match, particularly when used in high ambient temperature and 24/7 wide area surveillance.

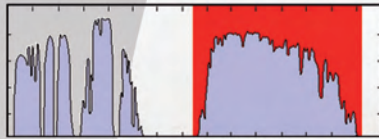
The modules are well suited for airborne and ground based applications like pilot sights or high performance surveillance sights, using 16:9 HD video format.





HiPIR-HD720L - MCT LWIR 1280 x 720 12µm PITCH IDCA

HIGH PERFORMANCE HD LWIR-MODULES



IR Sensor

Material	HgCdTe - Cadmium Mercury Telluride
Format	1280 x 720 (HD720)
Pixel pitch	12µm x 12µm
Detector spectral response	7.6µm - 9µm

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	~ 7Me ⁻ (IWR); ~ 8Me ⁻ (ITR)

Command & Control Electronics

Type	CCE8K-small-HD
Output video	CL LVDS 16bit (14bit ADC)
Input supply / control / synchronization	5VDC / CL LVDS, UART LVTTTL / Internal, external frame sync
Power consumption	~ 2.2W
Max. data rate	80 MHz (up to 120MHz on request)
Max. full frame rate	75Hz@CL base configuration (up to 120Hz on request)

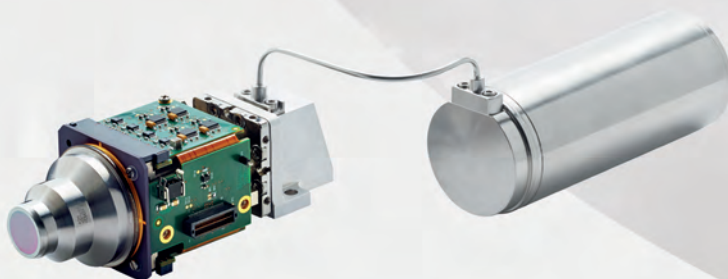
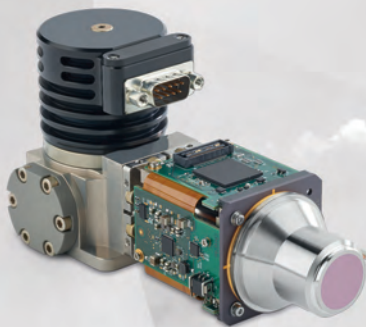
Dewar / Cooler

Cooler options	SX095	SF070	K543
FPA operating temperature	~ 75K	~ 90K	~ 75K
Cool down time*	5min	6min	5min
Cooler power consumption DC *	22W	18W	15W
MTTF cooler**	> 12,000h	> 20,000h	> 10,000h
Cold shield	F/2.0 standard, others on request		
Total weight IDCA	1.2kg	1.3kg	1.1kg

* at ambient room temperature
 ** will depend on usage profile

Performance

NETD (300K; half well)	~ 30mK
IETD	< 1.0 x NETD
Array operability	> 99.0%



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