

# NanoCore 640™

---

---

## NanoCore™ INFRARED



**640 x 480**

### Product Specifications

#### NanoCore™ 640 Features

- Small size, light weight, and low power
- 17um pitch Focal Plane Array
- Two channels of digital video operating simultaneously
- Two serial interfaces for communication & control; RS-232 and USB
- Two discrete inputs, programmable
- Electronics Zoom, 1x – 8x
- 30Hz frame rate
- Auto-Close shutter when camera is off
- Field – Upgradeable Software
- Advanced Graphical User Interface (GUI) for camera control and setup

#### NanoCore™ User Interfaces

- Common electronics interface for NanoCore 320, 640, and 1024 – for direct compatibility or upgrade in the NanoCore™ series
- Common mechanical Interfaces for lens and mounting facilitates individual user integration
- Single 80 pin connector for ease of integration with individual users' system electronics
- Additionally, custom optical, mechanical, and system electronics can be provided by L-3 to users' specifications
- NanoCore "M" includes electronics for video formats and input power range, and available with choice of optics

L-3 Communications Infrared Products 3414 Herrmann Dr., Garland, Texas 75041      January 2012 REV B  
"Cleared by DoD/OSR for public release under OSR Ref. 12-S-0501 on December 20, 2011."

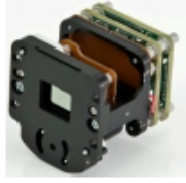


**ASPECT TECHNOLOGY & EQUIPMENT, INC**

811 E Plano Pky #107 • Plano, TX 75074 • Phn 972-423-6008/Fax 972-423-7717 • email [aspect@airmail.net](mailto:aspect@airmail.net) • [www.aspecttechnology.com](http://www.aspecttechnology.com)



## NanoCore™ 640 x 480



(20° shown)

	NanoCore™ 640		NanoCore™ 640M		
	5000979-1	5000978-3	5000978-1	5000978-2	
<b>Infrared</b>					
FPA Type	Uncooled a-Si Microbolometer				
FPA Resolution	640 x 480				
FPA pixel pitch	17um				
Spectral Band	LWIR				
Sensitivity	< 40 mK (with f/1.0 optic)				
Frame Rate	30Hz				
<b>Optics</b>					
Focal Length	None	45mm	30mm	15mm	
FOV (Horiz x Vert.)	N/A	14° x 10°	20° x 15°	40° x 30°	
F/#	N/A	f/1.2	f/1.0	f/1.0	
Lens Type	N/A	Atherm Manual focus	Atherm Manual focus	Atherm Manual focus	
Waterproof (3 meters)	N/A	IP68	IP68	IP68	
<b>Performance</b>					
Size (WxHxL)	1.5" x 1.5" x 1.5"	2.2" x 2.2" x 4.2"	2.0" x 2.0" x 3.7"	1.8" x 1.8" x 3.7"	
Weight	52 g	233 g	210 g	194 g	
Power	<1.1 Watt	< 1.4Watts			
<b>Features</b>					
Power input	3.3 Vdc	5 – 28 Vdc			
Digital Outputs	2 Channels Simultaneously	2 Channels Simultaneously			
Ch.1 Depth ; Format	8/16/24bit ; Parallel	8/16/24bit ; CameraLink			
Ch.2 Depth ; Format	8bit ; BT.656	8bit ; NTSC			
Turn on time	<3 sec				
Electronic Zoom	1x – 4x (0.25x step) and 4x - 8x (1x step)				
Image Processing	Histogram or AGC				
Polarity	Black Hot or White Hot				
Touch-up	Automatic (and Programmable) or Manual				
Serial Comm.	RS-232 or USB2.0 Full-Speed				
Discrete I/O	2 inputs (programmable)				
<b>Environment</b>					
Temperature, Operating	- 40° C to +85° C				
Temperature, Storage	-45° C to +105° C				
Mechanical Shock	20g (11ms) and 500g (o.4ms)				
Mechanical Vibration	4.3G (20Hz to 2000Hz)				
Humidity	5% - 95% RH (non-condense)				

Items described herein may require US Government authorization for export.

Specifications are subject to change without notice.

Camera Link™ is a registered trademark of AIA. NanoCore™ is a registered trademark of L-3 Communications.

Please call for additional information.



## ASPECT TECHNOLOGY & EQUIPMENT, INC

811 E Plano Pky #107 • Plano, TX 75074 • Phn 972-423-6008/Fax 972-423-7717 • email aspect@airmail.net • [www.aspecttechnology.com](http://www.aspecttechnology.com)



THERMAL-EYE™