



Warrior Systems

NanoCore®

INFRARED



320 x 240 Product Specifications

NanoCore® 320 Features

- Small size, light weight, and low power
- 17µm pitch Focal Plane Array
- Two channels of digital video operating simultaneously
- Scene Colorization, 8 temperature set-points
- Logo, symbology and text string programming
- Battery indicator, crosshair, digital temp and temp bar display
- Two serial interfaces for communication & control; Serial TTL and USB
- Two discrete inputs, programmable
- Continuous 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 20 pin cable or board to board connection for testing and integration.
- Simultaneous Camera Link™ and NTSC video output
- Additionally, custom optical, mechanical, and system electronics can be provided by L-3 to users' specifications
- Includes electronics for video formats and wide power range, and is available with choice of optics

NanoCore® 320 x 240



(57° shown)

	NanoCore® 320C		NanoCore® 320C		
	5001654-1,2 and-3	5001656-1	5001656-3	5001656-4	
Infrared					
FPA Type	Uncooled a-Si Microbolometer				
FPA Resolution	320 x 240				
FPA pixel pitch	17µm				
Spectral Band	LWIR				
Sensitivity	< 40 mK (with f/1.0 optic)				
Frame Rate	30Hz				
Optics	Additional optics can be adapted per user specifications				
Focal Length	None	25mm	11mm	5mm	
FOV (Horiz x Vert.)	N/A	12° x 9°	28° x 21°	57° x 43°	
F/#	N/A	f/1.0	f/1.0	f/1.0	
Lens Type	N/A	Manual focus	Manual focus	Manual focus	
Waterproof (3meter)	N/A	IP68	IP68	IP68	
Performance					
Size (WxHxL)	1.4" x 1.4" x 1.6"	1.5" x 1.5" x 3.1"	1.4" x 1.4" x 2.6"	1.4" x 1.4" x 2.6"	
Weight	30 g	99 g	72 g	72 g	
Power	<0.96 Watt *typical				
Features					
Power input	2.1-3.6 Vdc and 8-16 Vdc				
Digital Outputs	2 Channels Simultaneously				
Ch.1 Depth ; Format	8/16/24bit ; CameraLink				
Ch.2 Depth ; Format	8bit ; NTSC (supports 24 bit color)				
Turn on time	<3 sec				
Electronic Zoom	1-8x Continuous				
Image Processing	Histogram or AGC				
Polarity	Black Hot or White Hot				
Touch-up	Automatic (and Programmable) or Manual				
Serial Comm.	3.3V TTL or USB2.0 Full-Speed or High Speed (programmable)				
Discrete I/O	2 inputs (programmable)				
Environment					
Temperature, Operating	- 40° C to +85° C				
Temperature, Storage	-45° C to +105° C				
Mechanical Shock	20 g (11ms) and 500 g (0.4ms)				
Mechanical Vibration	4.3 g (20Hz to 2000Hz)				
Humidity	5% - 95% RH (non-condense)				

*3Vdc input, NTSC encoder turned OFF

Items described herein may require US Government authorization for export.