



NanoCore® 320 Infrared Core 320x240 Focal Plane Array



NANOCORE® 320 FEATURES:

- Small size, light weight, and low power
- 17µm 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 INTERFACE:

- 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



Warrior Systems

NANOCORE® 320 INFRARED CORE



		NanoCore 320	NanoCore 320M (57° shown)		
		5000971-3	5000970-3	5000970-2	5000970-1
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 (60Hz option)			
OPTICS	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	N/A	IP68	IP68	IP68
PERFORMANCE	Size (WxHxL)	1.4" x 1.4" x 1.3"	1.5" x 1.5" x 3.3"	1.4" x 1.4" x 2.7"	1.4" x 1.4" x 2.7"
	Weight	43 g	70 g	63 g	63 g
	Power	<1 Watt	< 1.3 Watts	< 1.3 Watts	< 1.3 Watts
FEATURES	Power input	3.3 Vdc	5 – 28 Vdc		
	Digital Outputs	2 Channels Simultaneously			
	Ch.1 Depth; Format	8/16/24bit; Parallel	8/16/24bit; CameraLink™		
	Ch.1 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 (Programmable) or Manual			
	Serial Comm.	RS-232 or USB 2.0 Full-Speed			
ENVIRONMENT	Discrete I/O	2 inputs (programmable)			
	Temperature, Operating	- 40° C to +85° C			
	Temperature, Storage	-45° C to +105° C			
	Mechanical Shock	20g (11ms) and 500g (0.4ms)			
	Mechanical Vibration	4.3G (20Hz to 2000Hz)			
	Humidity	5% - 95% RH (non-condense)			

Specifications are approximate and subject to change without notice.

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