

SWIR Snapshot MiniCamera SU320MS-1. 7RT



Date Revised: 30 JAN 04

VENDOR DESCRIPTION

The compact 320MS Indium Gallium Arsenide MiniCamera with snapshot image acquisition mode freezes moving objects and captures pulsed laser illuminated images in the Shortwave Infrared range (SWIR: 900-1700 nm). The compact (<math><285\text{ cm}^3</math>), lightweight (<math><300\text{ g}</math>), low-power (<math><1.6\text{ W}</math>) camera outputs analog video compatible with any television as well as 12-bit digital data via RS-422.

This all-solid-state camera with Automatic Gain Control and gamma correction is capable of imaging with CW or pulsed light sources or with ambient light. It is more sensitive to $1.06\text{ }\mu\text{m}$ laser designators than Silicon imagers and can detect $1.55\text{ }\mu\text{m}$ eye-safe covert laser designators, which are otherwise undetectable.

The camera is supplied with 25mm, f/1.4 C-mount lens, cables and sample LabView software files.



Product Manager Robotic & Unmanned Sensors
 Telephone: (732) 427-5827 / DSN 987
 Fax: (732) 427-5072 / DSN 987
 e-mail: SFAE-IEWS-NV-RUS@iew.s.monmouth.army.mil



Business Category: Small Business

PIR

Power Source	Environmental
Inputs: 3 to 5 VDC, <math><0.6\text{ A}</math> at 25° C Outputs: RS-170 or CCIR flat field corrected analog video, progressive or interlace AC wall transformer supplied with camera: Input: 100-240 VAC, 47-63 Hz	High Temp +40°C (without heat sink) Low Temp -10°C (without heat sink) Storage Temp -10° to 60°C Altitude Not specified Humidity 99% relative humidity per MIL-STD-810E Immersion Cannot be immersed in water Can be customized for a given application or environmental conditions

Sensor	Description	Detection	Size/Weight	Features
Passive Infrared	InGaAs Focal Plane Array NEI: $<5 \times 10^9\text{ photons/cm}^2\text{s}</math> 320 x 256 format with square 25\text{ }\mu\text{m} pixels Programmable integration time from 128\text{ }\mu\text{s} to video frame time of 16.25 ms SWIR band (0.9 to 1.7\text{ }\mu\text{m}) Thermoelectric cooler to stabilize FPA dark current over -10^\circ to +40^\circ\text{ C} operating range $	Lens-dependent Uses standard glass camera optics with C-mount (1"-32)	Size: $<285\text{ cm}^3</math> 5 \times 6 \times 9.5\text{ mm} Weight: 0.30 kg w/o lens $	<ul style="list-style-type: none"> ■ Capable of imaging targets illuminated by eye-safe CW or pulsed light sources that are undetectable (covert) to night vision goggles ■ Uniformity corrected video & digital outputs ■ RS-422/232 serial control ■ 12-bit digital data output via RS-422