

# IR 1000

## Infrared CCD Camera

The IR-1000 infrared CCD camera is designed especially for applications requiring high sensitivity in the near infrared. The high gain of the camera enables the user to detect images in real-time (30 frames/sec.) even when energy levels are very low. With wide range gain and black level controls, the IR-1000 enables the user to enhance image contrast and offers the ability to do short-term integration for increased sensitivity.



## FEATURES AND BENEFITS

Spectral Response	Excellent sensitivity in near IR and entire visible spectrum Response from 380 nm to 1200 nm
High Sensitivity	Provides 5 times more sensitivity at 900 nm
Two-Piece Design	Allows for convenient desktop control of image enhancement features Compact head for space limited applications
Wide Range Automatic Gain	Minimizes the need to constantly readjust gain under changing light conditions
Wide Range Black Level	Increases image contrast by almost 100 times when using automatic gain and manual black level
Ten-Step Grey Scale Test Signal	Allows the user to quickly and correctly set the contrast and brightness on a monitor
On-Chip Integration	Allows for increased sensitivity Can be used with stand-alone Investigator or various computer frame grabbers

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## SPECIFICATIONS

Pick-Up Device	1/2" interline CCD with microlens
Signal-to-Noise Ratio	56dB
Shading	<5% overall
Sensitivity	.05fc (0.5 lux) on sensing area @ 3200K
Minimum Illumination	.00035 fc (.0035 lux)
Gamma Correction	Gamma set to 1.0 at factory
Gain	Switchable fixed or automatic
Electronic Shutter	Nine-step manual to 1/10,000

	(IR-1000) RS-170	(IR-1000 E) CCIR
Active Picture Elements	768 (H) x 494 (V)	752 (H) x 582 (V)
Picture Element Size	8.5um (H) x 9.8um (V)	8.6um (H) x 8.3um (V)
Horizontal Resolution	570 TVL	560 TVL
Pixel Clock Frequency	14.318 mHz	14.1875 mHz
Vertical Rate	59.94 Hz	50 Hz
Horizontal Rate	15,734 Hz	15,625 Hz

Lens Mount	"C" mount
Options	Investigator 1/2" optical coupler

<b>WEIGHT</b>	
Control Unit	1.48 lb. (0.67 Kg)
Camera Head	0.25 lb. (.11 Kg)

<b>SIZE</b>	
Control Unit	5-1/2" (W) x 1-1/2" (H) x 8" (L)
Camera Head	1-3/4" (W) x 1-1/8" (H) x 3-3/4" (L)

Operating Temperature	0°C to +40°C
Input Voltage	95 VAC to 250 VAC

## SPECTRAL RESPONSE

