

VE-1000 Series

Infrared Lead Sulfide Video Camera

The VE-1000 real-time video camera is ideal for applications requiring infrared sensitivity up to 2200nm. Designed for quantitative analysis, the front panel controls offer precise automatic or manual operation. Maximum contrast and optimum image sharpness is obtained through the extended gain and black level offset ranges and enhance controls. The unique shading correction circuitry provides correction of optical and lighting irregularities in the horizontal and vertical axes, as well as the diagonal.



Lenses not included.

Above: Dage-MTI VE-1000 Infrared Lead Sulfide Video Camera..

FEATURES AND BENEFITS

Imaging Device	Lead Sulfide (1-inch infrared vidicon)
Spectral Response	400 nm – 1800 nm (2200 nm)
Real-Time Video Output	RS-170 or CCIR
High Resolution	700 TV lines Resolves fine detail
Designed for Quantitative Analysis	Precise, lockable controls for calibrated measurements
Adjustable Image Enhancement	Automatic/manual gain control Automatic/manual black level control Enhance and bandwidth control for optimum sharpness with minimum noise Gamma provides setting of linear grey-scale for quantitative measurements or compensation for CRT display to improve low contrast images
High/Low Gain Switch	Provides additional gain boost for low contrast images
Shading Correction	Dynamic real-time shading correction corrects for camera and optical image shading errors (horizontal, vertical, diagonal and parabolic)

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FEATURES AND BENEFITS

Polarity Reversal	Provides inverted grey scale output
Grey Scale Stretch	Provides a six-fold amplification of user selected grey levels
Two-Piece Design	Allows for convenient desk-top control of image enhancement features Extended cable lengths available
Reference Signal	Allows the user to quickly and correctly set the contrast and brightness on a monitor

SPECTRAL RESPONSE

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SPECIFICATIONS

Input Voltage	98 to 135 VAC, 50/60 Hz 195 to 250 VAC, 50/60 Hz
Vertical Sweep Rate	60 Hz Standard (50 Hz, 625 line system)
Horizontal Sweep Rate	15,750 Hz Standard. Optional rates available.
Scanning	2:1 Interlace, 525/60 or 625/50 standard.
Imaging Device	Lead Sulfide (1-inch infrared vidicon)
Sensitivity	75 nA of average tube signal current for 1V composite output.
Enhancement	Adjustable 0 to +12 db @ peaking frequency. 7 mHz bandwidth: 5.5 mHz peaking frequency
Auto Gain Range	> 20 db at full bandwidth
Video Output	Composite 1Vpp terminated in 75 ohms. Black to White: 0.65 Vpp Sync: 0.3 Vpp Dual isolated video outputs.
Video Polarity	Switchable
Geometric Distortion	Within Major Circle: 0.5 Overall: 1%
Linearity Distortion	Horizontal: 0.25% Vertical: 0.25%
Video Amplifier	> 10 mHz Bandwidth DC Coupled Output White Clipper Variable Bandwidth/Enhance Auto Video Level Auto Black Level Variable Gamma Correction
Options	Crystal Control External Drive/Sync Lock

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SPECIFICATIONS

(CONTINUED)

CAMERA MECHANICAL

Head (less lens)	2.87" H x 2.75" W x 9.25" L
Head Weight	2.25 lbs. (1 kg)
Control Unit	4.25" H x 12.25" W x 16.75" L
Control Weight	13.5 lbs. (6.12 kg)
Lens Mount	16mm C-Mount
Camera Mount	Two ¼" x 20 tapped holes

ENVIRONMENTAL

Ambient Temperature Limits	-20°C to +65°C
Air Pressure Limits	Sea Level to 10,000 ft.
Vibration Limits	15 to 55 Hz., .015 inch excursion, 45 min. each axis
Shock Limits	5 g's
Humidity Limits	0 to 95% humidity



Above (left) Dage-MTI VE-1000 Series camera head, and (right) control panel. Lens not included.



Dage-MTI (219) 872-5514

Call for additional product information or free product demos.

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