70 Series Infrared

Lead Sulfide Video Camera

The LSC-70 series 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 aperture and bandwidth controls.

Above: Dage-MTI LSC 70 Infrared Lead Sulfide Video Camera. Comparable to the now discontinued Hamamatsu C2741-03.

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
Image Tubes	Lead Sulfide (response up to 2200nm)
Designed for Quantitative Analysis	Precise, lockable controls for calibrated measurements
Adjustable Image Enhancement	Automantic/manual gain control Automatic/manual black level control Aperture and bandwidth control for optimum sharpness with minimum noise Gamma provides setting of linear 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

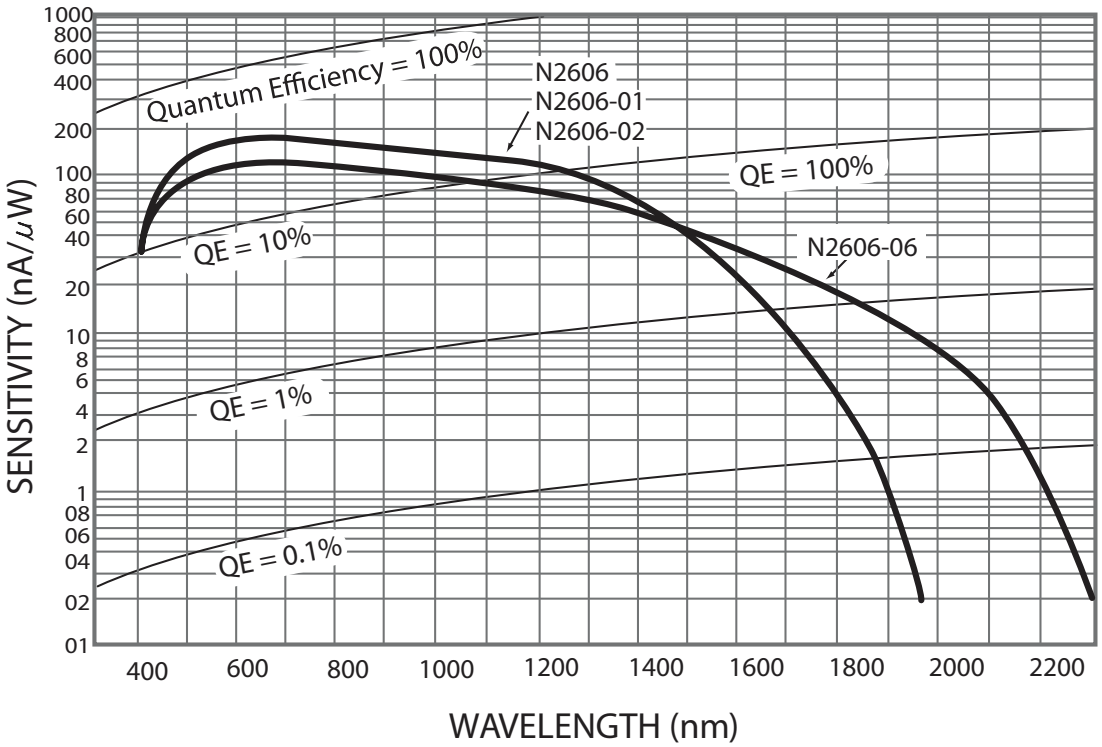
(continued)

70 Series Infrared Lead Sulfide Video Camera

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
Ten-Step Grey Scale Test Signal	Allows the user to quickly and correctly set the contrast and brightness on a monitor

SPECTRAL RESPONSE



SPECTRAL RESPONSE for 70 Series Lead Sulfide Camera

70 Series Infrared Lead Sulfide Video Camera

SPECIFICATIONS

Input Voltage	98 to 135 volts 50/60 Hz or 195 to 260 volts 50/60 Hz
Input Power	18 watts @ 120 volts AC
Vertical Sweep Rate	60 Hz standard or 50 Hz
Horizontal Sweep Frequency	12 KHz to 35 KHz
Scanning	2:1 Interlace, 525/60 or 625/50 standard
Imaging Device	Lead Sulfide (1-inch infrared vidicon)
Sensitivity	75 nanoamps of average tube signal current for 1 volt composite output
Automatic Gain	Over 12 db at full bandwidth
Video Output	Composite 1 Vpp, black to white .65 volts, .3v sync, black negative Polarity; source terminated 75 ohm. Dual isolated video outputs.
Geometric Distortion	Within major circle 0.5% - Overall 1.0%
Linearity Distortion	Horizontal: 0.25% Vertical: 0.25%
External Lock	Lockable to External H&V Drive or Composite Sync
Enhancement	Adjustable 0 to + 12db at user specified peaking frequency
Video Amplifier	Greater than 18 mHz bandwidth DC coupled output, black reference at ground potential White Clipper Variable Bandwidth control Automatic Black Level Automatic Video Level Gamma correction – switchable between 1 and .5
Options	Crystal Control External Drive/Sync Lock

MECHANICAL

Head (less lens)	2-7/8" (H) x 2-3/4" (W) x 9-1/4" (L)
Weight	2 lbs. 4 oz. (1 Klg)
Control Unit	3-3/4" (H) x 8-5/8" (W) x 12-3/4" (L)
Weight	7.2 lbs (3.28 Kg)
Lens Mount	"C" mount
Camera Mount	Two 1/2" x 20 tapped holes
Type of Coaxial Connector	BNC

70 Series Infrared Lead Sulfide Video Camera

SPECIFICATIONS
(CONTINUED)

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 LSC 70 camera head, and (right) control panel. Lens not included.

Dage-MTI (219) 872-5514

Call for additional product information or free product demos.
Visit online at www.dagemti.com.