



CAM\IR 2400



Infrared Camera Specifications

Model numbers and specifications are subject to change without notice.

Performance

Noise Equivalent Temperature Difference: 0.13°C, maximum, 0.1 typical (with recursive filter disabled, $f/1.0$ lens)

Video Dynamic Range: 9 bits analog, 16 bits digital

Startup: <30 seconds (typical)
<90 seconds (maximum)

Frame Rate: 30 Hz NTSC, 25 Hz PAL

Contrast/Brightness Control: Automatic or manual

Image: Grayscale, white objects hot or cold (selectable)

Recursive Filter: 2, 4, 8 or 16 frame recursion, user enabled and selected

Electronic zoom: 2X, with peaking and interpolation

Digital Computer Control: RS-232

Functions remotely controllable: Gain, level, polarity, recursive filtering, lens focus (for motor-driven lenses), symbology brightness

Camera Configuration: May be saved, recalled or reset to a factory default

Lens Options

- 18 mm $f/1$, preset manual focus
- 25 mm $f/1$, preset manual focus
- 50 mm $f/1$, preset manual focus
- 75 mm $f/1$, preset manual focus
- 75 mm $f/1$, electric focus
- 100 mm $f/1$, electric focus
- 150 mm $f/1$, electric focus

Physical

Size : 13 in L x 8 in diameter,
33 cm L x 21 cm diameter

Weight : 16 lb, 7.2 kg

Color: Black, White, Custom

Operating Temperature: -30°C to 66°C (in open air ambient)

Storage Temperature: -46°C to 71°C

Package Integrity: Splash-proof per IEC pub 529, IPX4

Mechanical Shock: 20g, 11ms, any axis, while operating

Electromagnetic Compatibility: CE mark class A

Operating Voltage: 9 to 28 VDC / 24 VAC optional

Operating Voltage Protection: -12 to 40 VDC

Operating Current: Steady State: <1.0A

Operating Current: Start-up: 7.0A, peak

Analog Video Output: NTSC

Digital Video Output: 16 bit parallel (simultaneous with analog)

Detector

Type: Hybrid ferroelectric staring focal plane array

Sensing Approach: Pyroelectric and dielectric effects

Sensor Material: Barium Strontium Titanate (BST)

Spectral Range: 7-14 microns

Resolution and Pitch: 320 x 240 pixels, 48.5 microns

MTF: 22 percent typical at fundamental spatial frequency

NETD: 0.1°C typical (with $f/1.0$ germanium lens set)

Sensitivity: 45 mv/°C

Absorption Efficiency: 76 percent

Pixel Clock Speed: ~6 MHz

Package: 40-pin ceramic

Temperature Stabilization: Thermoelectric cooler

Window Type: Silicon