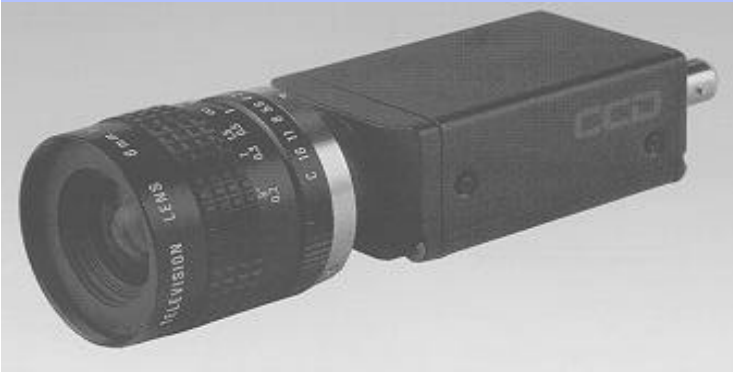# Near Infrared Camera KP-M3R

Hitachi Denshi America Ltd.

Near Infared Camera KP-M3R

- **Near IR Sensitivity Above 900 nm**
- **Peak Sensitivity at 510 nm**
- **Compact Rugged Design**
- **High Resolution**
- **Multiple Step Electronic Shutter**
- **Internal or External Sync Modes**
- **Frame or Field Integration**
- **Field-on-Demand Mode**

The **KP-M3R** is a 1/3 inch CCD monochrome camera that is useful into the near infrared spectrum. Peak sensitivity of the camera occurs at 640 nanometers compared with a conventional camera whose peak sensitivity occurs at 510 nanometers. Useful sensitivity of the **KP-M3R** extends above 900 nanometers, making it useful for applications ranging from microscopy to image processing systems. A high horizontal resolution of 570 TV lines and a S/N of 56 db provide detailed images with low noise, in a compact rugged package. Standard features include a multiple step electronic shutter, internal or external synchronization, field or frame integration mode, and a field-on-demand function. Using the field-on-demand feature the timing and length of an exposure can be accurately controlled. The field-on-demand can function in the one trigger, two trigger, fixed shutter, and external shutter modes of operation, allowing easy integration into machine vision systems.

Specifications

Imager: 1/3 inch Interline transfer CCD
Sensing Area: 4.8 x 3.6 mm
Pixels: 768x494
Cell Size: 6.35 x 7.4
Resolution: 570 TV lines
Sensitivity: 200Lux   f4.0   3200K
Min. Illum.   0.3 lux at f1.4
S/N: 56 db
Gamma: 0.45 or 1.0 selectable
Integration: Field or Frame Selection
AGC: On / Off
Shutter: 1/60 - 1/10000
Sync: Internal / External HD / VD drive
Output: RS-170 1.0 V p-p
Power: 12 volts DC   180ma
Size: (W x H x D)   44 x 29 x 72 mm
Weight: 120 grams
 Lens: C - Mount

KP-M3R Spectral Response

The graph below shows the relative spectral response characteristics of the **KP-M3R.** The vertical axis indicates relative sensitivity, while the horizontal axis indicates wavelength in nanometers.