

# Near Infrared Camera KP-F2A / B



## Near Infrared Progressive Scan Camera KP-F2 A/B

- Peak Sensitivity of 760 nm
- Useable Sensitivity Above 1000 nm
- 30 Frames per Second KP-F2A
- 60 Frames per Second KP-F2B
- High Resolution
- Internal or External Sync Mode
- Fixed Gain or AGC
- Multiple Step Electronic Shutter
- Frame-on-Demand

### Specifications

Imager: 1/3 inch Frame Transfer CCD  
Pixels: 658 x 496  
Cell Size: 7.4 x 7.4  
Resolution: 500 TV lines Horizontal  
485 TV lines Vertical  
Sensitivity: 30 lux f4.0 3200 K  
Min. Illum: 0.3lux at f1.4  
S/N: 50 db  
Gain: Fixed or AGC  
Sync: Internal or External  
Gamma: 0.45 or 1.0 Selectable  
Shutter: 1/30 - 1/10,000 second  
Trigger: Field-on-Demand  
Output: Single **KP-F2A** or Dual  
**KP-F2B** 1.0 Vp-p  
Power: 12 Volts DC  
Size: ( W x H x D ) 44 x 44 x 110 mm  
Weight: 200 grams

The **KP-F2A/B** features a 1/3 inch progressive scan microlens IT CCD that has a spectral response that extends into the near infrared region. Peak sensitivity occurs at approximately 760 nanometers, while useful sensitivity extends above 1000 nanometers. The use of progressive scanning provides improved vertical resolution and reduces horizontal smear in moving objects. The use of square pixels can reduce processing time in vision systems. Designed for use in the medical, microscope, and machine vision markets, the **KP-F2A/B** extends the range of imaging into the near IR region. A multiple step electronic shutter with a range up 1/10,000 second can be selected to “stop action” on moving objects. With the field-on-demand function, the start of an exposure and the length of the exposure can be accurately controlled. The video is immediately output at the end of the exposure. The **KP-F2A** has a single progressive scan output at 30fps, while the **KP-F2B** has dual outputs, and can output double speed video at 60 frames per second.

### KP-F2 A/B Spectral Response

The graph below shows the relative spectral response characteristics of the **KP-F2**. The vertical axis indicates relative sensitivity, while the horizontal axis indicates wavelength in nanometers.

