



# illunis VMV Cameras



## Introduction:

The VMV cameras are our latest area scan camera for the machine vision industry, scientific industry, medical and microscopy industry. Using the latest KODAK TRUESENSE 5.5 micron CCD sensor, these cameras offer outstanding quality and have additional features such as low smear of  $-100\text{dB}$ , blooming suppression of  $>300\text{x}$ , full 14 bit sampling and 12 bit data paths, advanced triggering and CCD readout control, built in detectors that analyze the camera's performance, and image processing to remove sensor defects. The VMV cameras provides extreme performance at a very affordable price.

## VMV Product Highlights:

- Latest Generation Imagers
- 14 bit sampling and 12 bit data path
- On screen text and line plots
- Pixel or Column defect correction
- Digital gain and offset for each tap
- Analog gain and offset for each tap
- Built in detectors measure performance
  - Exposure and Focus
  - Tap matching
  - Real time SNR
  - Raster parameters
- Built In test
- Camera control GUI
  - Visual Basic Version
  - Free Source code with camera
  - Easy setup and control
- High-Speed Digital Output using
  - Camera Link base Standard
  - GigE Vision



## OEM Sales and Support

### USA Headquarters

Address: 14700 Excelsior Blvd  
Minnetonka, MN 55345 USA

tel: +1-952-975-9203  
fax: +1-952-294-8308  
info@illunis.com  
www.illunis.com

*Versatile Machine Vision*

*Advanced Digital Machine Vision Cameras*





# illunis VMV Cameras

	VMV-1M	VMV-2M	VMV-2MHD	VMV-4M	VMV-8M
<b>Sensor</b>	<b>Kodak KAI-01050</b>	<b>Kodak KAI-02050</b>	<b>Kodak KAI-02150 HD</b>	<b>Kodak KAI-04050</b>	<b>Kodak KAI-08050</b>
<b>Technology</b>	Interline Transfer CCD, Progressive	Interline Transfer CCD, Progressive	Interline Transfer CCD, Progressive	Interline Transfer CCD, Progressive	Interline Transfer CCD, Progressive
<b>Typical Sensor DNR</b>	64dB	64dB	64dB	64dB	64dB
<b>Lens Mount</b>	C-mount or custom.	C-mount or custom.	C-mount or custom.	F-mount or custom.	F-Mount or custom.
<b>Sensing Area</b>	5.6 x 5.6 mm	8.8 x 6.6 mm	10.5 x 5.9 mm	12.8 x 9.6 mm	18.13 x 13.60 mm; 4/3"
<b>Pixel Size</b>	5.5um x 5.5um	5.5um x 5.5um	5.5um x 5.5um	5.5um x 5.5um	5.5um x 5.5um
<b>Active Pixels</b>	1024 (h) x 1024 (v)	1600 (h) x 1200 (v)	1920 (h) x 1080 (v)	2336 (h) x 1752 (v)	3296 (h) x 2472 (v)
<b>Pixel Clock</b>	40 MHz	40 MHz	40 MHz	40 MHz	40 MHz
<b>Frame Rates @ 40Mhz</b>	60 dual, 30 single tap	34 dual, 18 single tap	33 dual, 17 single tap	16 dual, 8 single tap	8 dual, 4 single tap
<b>Output Sensitivity</b>	34µV/e	34µV/e	34µV/e	34µV/e	34µV/e
<b>Tap Reorder</b>	Built In	Built In	Built In	Built In	Built In
<b>Binning</b>	yes	yes	yes	yes	yes
<b>Exposure</b>	Global Electronic Shutter	Global Electronic Shutter	Global Electronic Shutter	Global Electronic Shutter	Global Electronic Shutter
<b>Exposure Modes</b>	Triggered Program Exposure (TPE) Triggered Manual Exposure (TME) Triggered Double Exposure (TDE) Triggered Overlap Exposure (TOE) Free Run (FRM), Free Run Synchronized (FRS)	Triggered Program Exposure (TPE) Triggered Manual Exposure (TME) Triggered Double Exposure (TDE) Triggered Overlap Exposure (TOE) Free Run (FRM), Free Run Synchronized (FRS)	Triggered Program Exposure (TPE) Triggered Manual Exposure (TME) Triggered Double Exposure (TDE) Triggered Overlap Exposure (TOE) Free Run (FRM), Free Run Synchronized (FRS)	Triggered Program Exposure (TPE) Triggered Manual Exposure (TME) Triggered Double Exposure (TDE) Triggered Overlap Exposure (TOE) Free Run (FRM), Free Run Synchronized (FRS)	Triggered Program Exposure (TPE) Triggered Manual Exposure (TME) Triggered Double Exposure (TDE) Triggered Overlap Exposure (TOE) Free Run (FRM), Free Run Synchronized (FRS)
<b>Exposure Resolution</b>	TBA	TBA	TBA	TBA	TBA
<b>Sensor Taps</b>	1 or 2 selectable	1 or 2 selectable	1 or 2 selectable	1 or 2 selectable	1 or 2 selectable
<b>Gain Control</b>	TBA	TBA	TBA	TBA	TBA
<b>Offset Control</b>	TBA	TBA	TBA	TBA	TBA
<b>Power</b>	12VDC @ 3.4W	12VDC @ 3.5W	12VDC @ 3.5W	12VDC @ 3.8W	12VDC @ 3.9W
<b>Dimensions</b>	60 x 60 x 28mm	60 x 60 x 28mm	60 x 60 x 28mm	60 x 60 x 28mm	60 x 60 x 28mm
<b>Weight w/ F-mount</b>	235 grams	235 grams	235 grams	235 grams	235 grams
<b>Operating Temp</b>	0C to +50C	0C to +50C	0C to +50C	0C to +50C	0C to +50C
<b>Options</b>	CALL for special configurations including conformal coating, special airborne configurations and custom lens mounts	CALL for special configurations including conformal coating, special airborne configurations and custom lens mounts	CALL for special configurations including conformal coating, special airborne configurations and custom lens mounts	CALL for special configurations including conformal coating, special airborne configurations and custom lens mounts	CALL for special configurations including conformal coating, special airborne configurations and custom lens mounts

## Custom and OEM designs

We specialize in Mega pixel video camera designs for OEM's. We design and build in-house and maintain full creative control of electronics, interfaces, industrial designs, optics and driver software and have an extensive library of design and intellectual property to serve as a foundation for customization. Because our camera designs are extremely modular, we can quickly and economically configure cameras to your requirements.

We are happy to customize camera features or packages to meet your needs and can design YOU a camera around any sensor that you choose

**For more information** on any illunis product including detailed specifications and options please visit our web page at [www.illunis.com](http://www.illunis.com) or email [info@illunis.com](mailto:info@illunis.com) or call us at the number below. illunis specializes in applying our proven intellectual property to your custom requirements at realistic NRE fees - call and find your OEM solution today.

<b>illunis LLC</b> USA Sales 14700 Excelsior Blvd. Minnetonka, MN 55345	Phone: 952.975.9203 FAX: 952.294.8308 email: <a href="mailto:info@illunis.com">info@illunis.com</a> web: <a href="http://www.illunis.com">www.illunis.com</a>
--	--



We Specialize in  Sensors

