



vieworks

# VH-11MG / VH-16MG

11 & 16 MEGA PIXEL HIGH RESOLUTION, HIGH SPEED,  
GigE INTERFACE, PROGRAMMABLE DIGITAL CAMERA



VH-11MG and VH-16MG are Progressive Scan type high-resolution industrial Area Scan cameras. All functions can be programmed and updated in the field without any disassembling process. The combination between Vieworks' vision technology and top class Kodak CCD sensors, makes this cameras suitable for a wide range of applications such as Medical, Scientific and Industrial where high resolution Images are required.

## Main Features

- \*GigE Interface
- \*Kodak Progressive Scan IT CCD Imager
- \*8/10/12 bit Data Output, User Defined LUT
- \*Flat Field Correction
- \*Field Upgradeable Firmware
- \*Defective Pixel Compensation
- \*Available in Color or Monochrome

## Applications

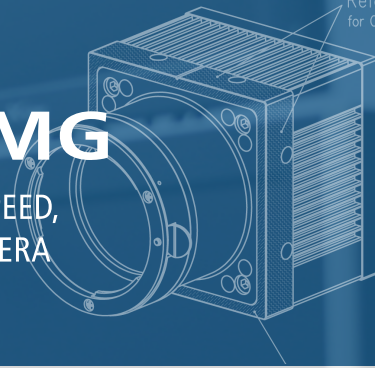
- \*Flat Panel Display Inspection
- \*Research and Scientific Imaging
- \*Machine Vision Inspections
- \*Microscopy and Metrology
- \*Remote Sensing and Scanning

[www.vieworks.com](http://www.vieworks.com)



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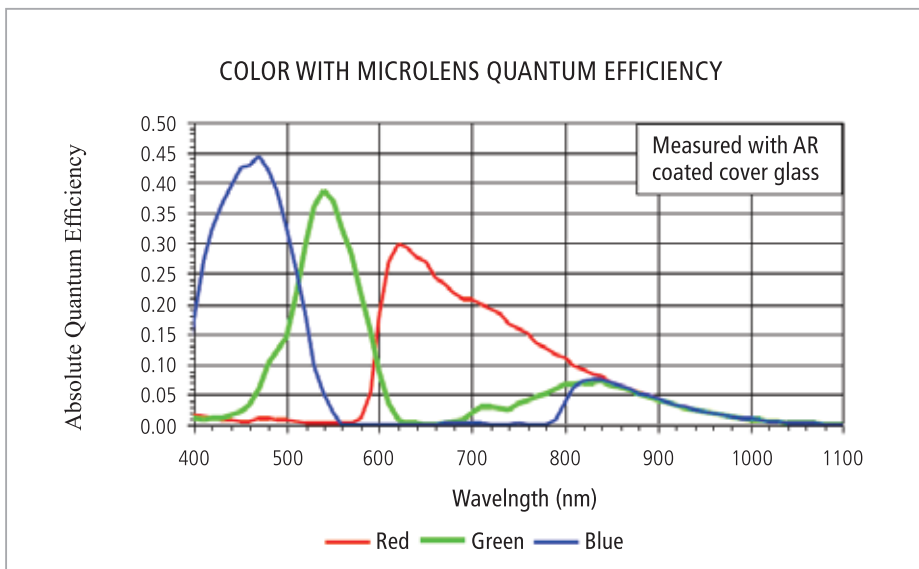
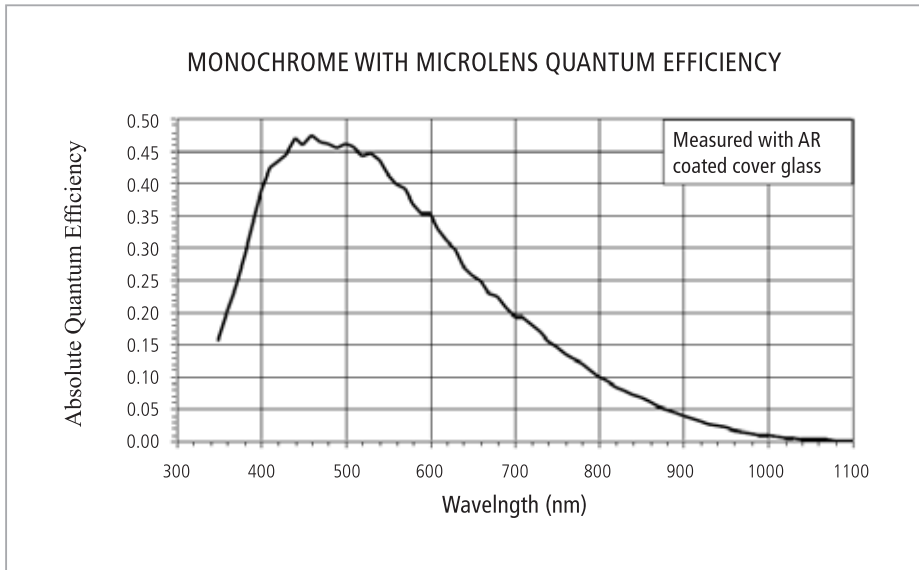
11 & 16 MEGA PIXEL HIGH RESOLUTION, HIGH SPEED,  
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## Specifications

| Model            | VH-11MG   | VH-16MG                                      |
|------------------|---|--|
| Active Image     | 4008(H) × 2672(V)   | 4872(H) × 3248(V)                            |
| Pixel Clock      | 40 / 30 MHz   | 40 / 30 MHz                                  |
| Pixel size       | 9.0 μm × 9.0 μm   | 7.4 μm × 7.4 μm                              |
| Video Output     | 8/10/12 bits, 1 or 2 Tap  |  |
| Camera Interface | GigE  |  |
| Max. Frame Rate  | 6.4 /5fps (dual) / 3.4 /2.6 fps (single)  | 4.2 /3.2 fps (dual) / 2.2 / 1.7 fps (single) |
| Exposure Time    | 1/7000 sec ~7 sec<br>(10 us step)   | 1/4500 sec ~7 sec<br>(10 us step)            |
| Partial Scan     | 27 fps at 334 Lines<br>(max. speed)   | 17 fps at 406 Lines<br>(max. speed)          |
| Gamma Correction | User defined LUT  |  |
| Black Offset     | Adjustable (0~127 LSB at 12 bit, 256 step)  |  |
| Video Gain       | Analog: 0 ~ 32 dB, 900 step   |  |
| Trigger Mode     | Mode( free run , standard, fast, double, overlap ) Programmable exposure time,<br>Programmable trigger polarity |  |
| External Trigger | External, 3.3V - 5.0V, 10mA, optically isolated   |  |
| Software Trigger | CC1, programmable expose  |  |
| Dynamic Range    | > 64 dB   |  |
| Lens Mount       | F-mount   |  |
| Power            | 10~14V DC , MAX. 8W   |  |
| Environmental    | -5°C~+40°C, storage : -30°C~65°C  |  |
| Mechanical       | 68mmX68mmx91.1mm, 495g (w/ F-mount adaptor)   |  |

## Quantum Efficiency Curves



## Ordering Scheme

| VH - 16MG - M4AO    |                |
|---------------------|----------------|
| Series              | Sensor Option  |
| VH series           | A0 - Kodak     |
| Sensor Resolution   | Frame Rate     |
| 11M - 11 megapixels | 4 - 4 fps      |
| 16M - 16 megapixels | 6 - 6 fps      |
| Interface           | Mono / Color   |
| G - GigE            | M - Monochrome |
|                     | C - Color      |

## Connector Specifications

Power



1 2 3 : +12V DC, 4 5 6 : GND  
(HR10A-7R-6PB)

Control

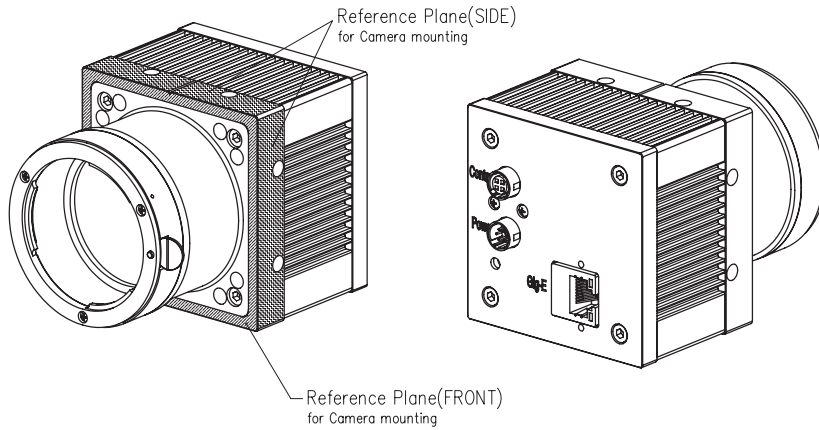
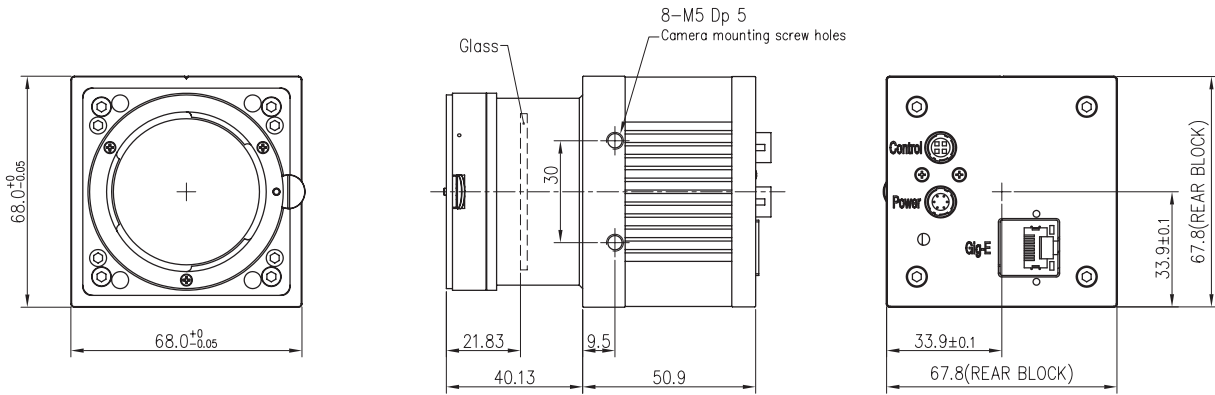


1 : Trigger IN+, 2 : Trigger IN-  
3 : Strobe OUT- (GND), 4 : Strobe OUT+  
(HR10A-7R-4SB)

Connectors on camera body

# Mechanical Dimensions

Unit : mm



For more information please contact local distributor or visit our website at [www.vieworks.com](http://www.vieworks.com)

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ISO-9001, ISO-13485

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