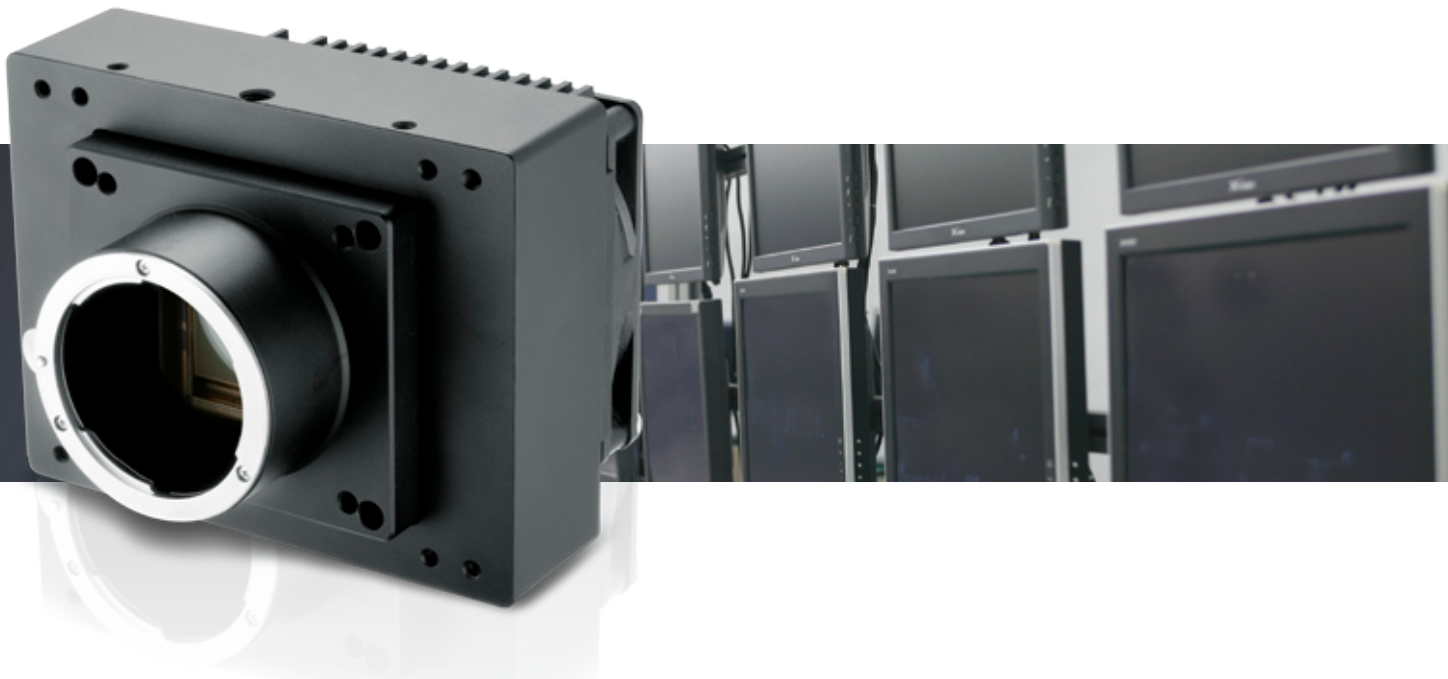




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# VP-16MC

**16 MEGA PIXEL, THERMOELECTRIC PELTIER COOLED,  
HIGH SPEED PROGRAMMABLE DIGITAL CAMERA**



The VP-16MC is a thermoelectric Peltier cooled digital camera with 16 megapixel high resolution. Uniquely designed by Viewworks' proven cooling technology, it provides optimal imaging solution for the most demanding industrial and scientific applications. It is designed such that the sensor is cooled 20 degrees below ambient temperature with a fan installed. Built based on KODAK's KAI-16000 interline transfer CCD, it provides 4872×3248 resolution and process image at max 4 fps speed. Its selectable readout clock rate (standard 30MHz vs. overclock 40MHz) allows customers for flexible choice for different applications.

## Main Features

- \*Thermoelectric Peltier Cooled
- \*16 megapixel High Resolution (4872 × 3248 pixels) @ max 4 fps
- \*Kodak Interline Transfer Progressive Scan CCD Imager
- \*Base Camera Link Interface
- \*6/10/12 bit Data Output, User Defined LUT
- \*Flat Field Correction
- \*Field Upgradeable Firmware
- \*Defective Pixel Compensation
- \*Available in Color or Monochrome

## Applications

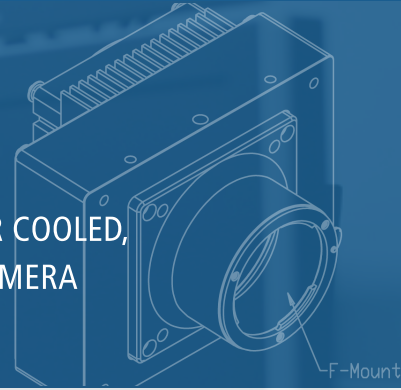
- \*Flat Panel Display Inspection
- \*Research and Scientific Imaging
- \*Machine Vision Inspections
- \*Microscopy and Metrology

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



# VP-16MC

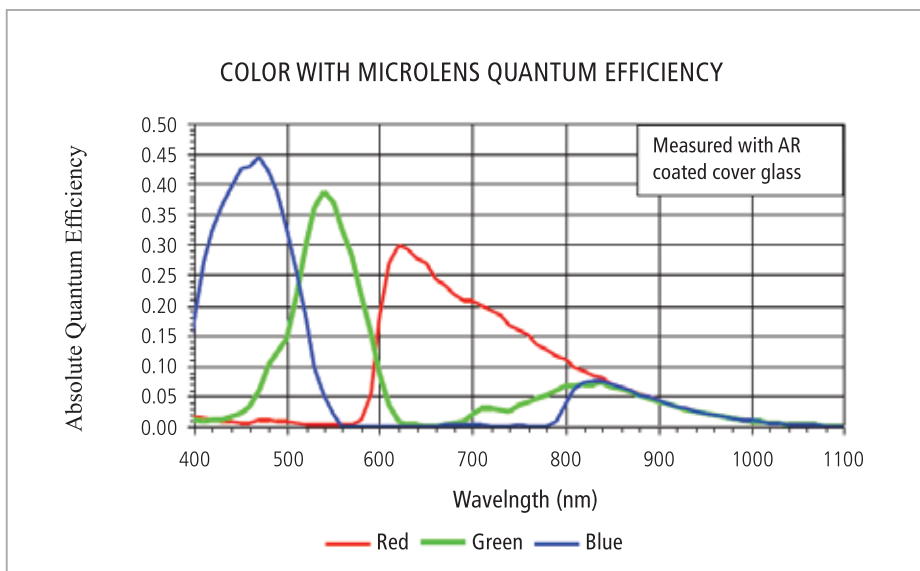
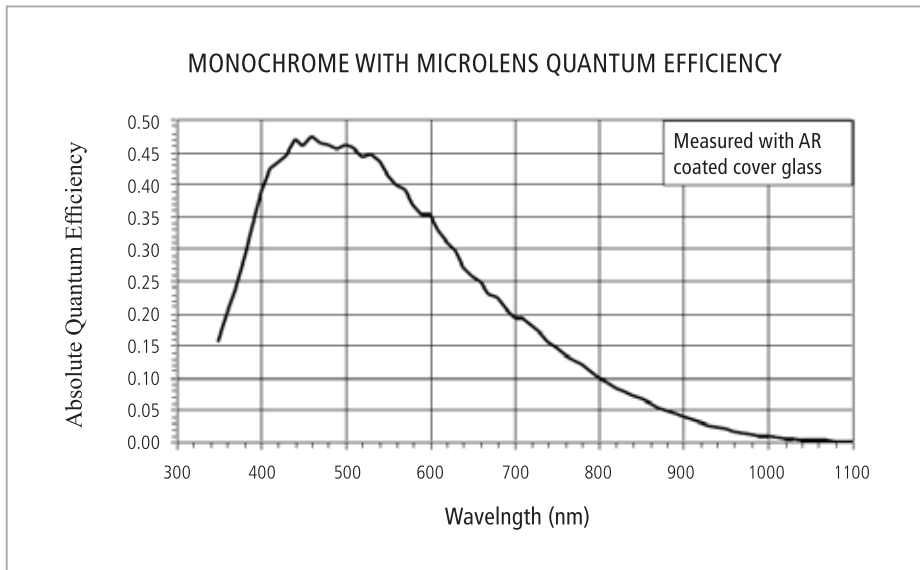
16 MEGA PIXEL, THERMOELECTRIC PELTIER COOLED,  
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## Specifications

Model	VP-16MC
Imaging Device	Kodak KAI-16000 (grade 1, color or monochrome), Interline, Progressive Scan
Active Image Pixels	4872 (h) × 3248 (v), 16 megapixels
Pixel size	7.4 $\mu$ m × 7.4 $\mu$ m
Active Image Area	36 mm (h) × 24 mm (v)
Sensor Clock Rate	Switchable between 40MHz (overclock) / 30 MHz (standard)
Video Output	Digital, 8/10/12 bit, one(1) or two(2) Channel Output
Camera Interface	Base Camera Link
Max. Frame Rate	4.2 fps (dual) / 2.2 fps (single) at 40MHz, 3.2 fps (dual) / 1.7 fps (single) at 30MHz
Exposure Time	1/4500 sec to 7 sec (10 us step)
Partial Scan	17 fps at 406 Lines (max. speed)
Gamma Correction	User defined LUT
Black Level Offset	Adjustable (0~127 LSB at 12 bit , 256 step)
Video Gain	Analog: 0 to 32 dB, 900 steps
Trigger Mode	Mode( free run , standard, fast, double, overlap )
External Trigger	3.3V - 5.0V, 10mA, optically isolated
Software Trigger	CC1, programmable exposure
Dynamic Range	> 64 dB
Lens Mount	No mount, F-mount
Cooling Method	Thermoelectric Peltier Cooling
Cooling Performance	20°C below ambient temperature – standard cooling with a fan
Power Requirements	10~14VDC , max. 25W
Environmental	Operating : -5°C to 40°C, Storage : -30°C to 65°C
Mechanical	125mm × 99mm × 106mm, 1290g (w/ F-mount adaptor)

## Quantum Efficiency Curves



## Ordering Scheme

VP - 16MC - M4A0

Series

VP series

Sensor Resolution

16M - 16 megapixels

Interface

C - Camera Link

Sensor Option

A0 - Kodak

Frame Rate

4 - 4 fps

Mono / Color

M - Monochrome  
C - Color

## Connector Specifications

Power



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

Control

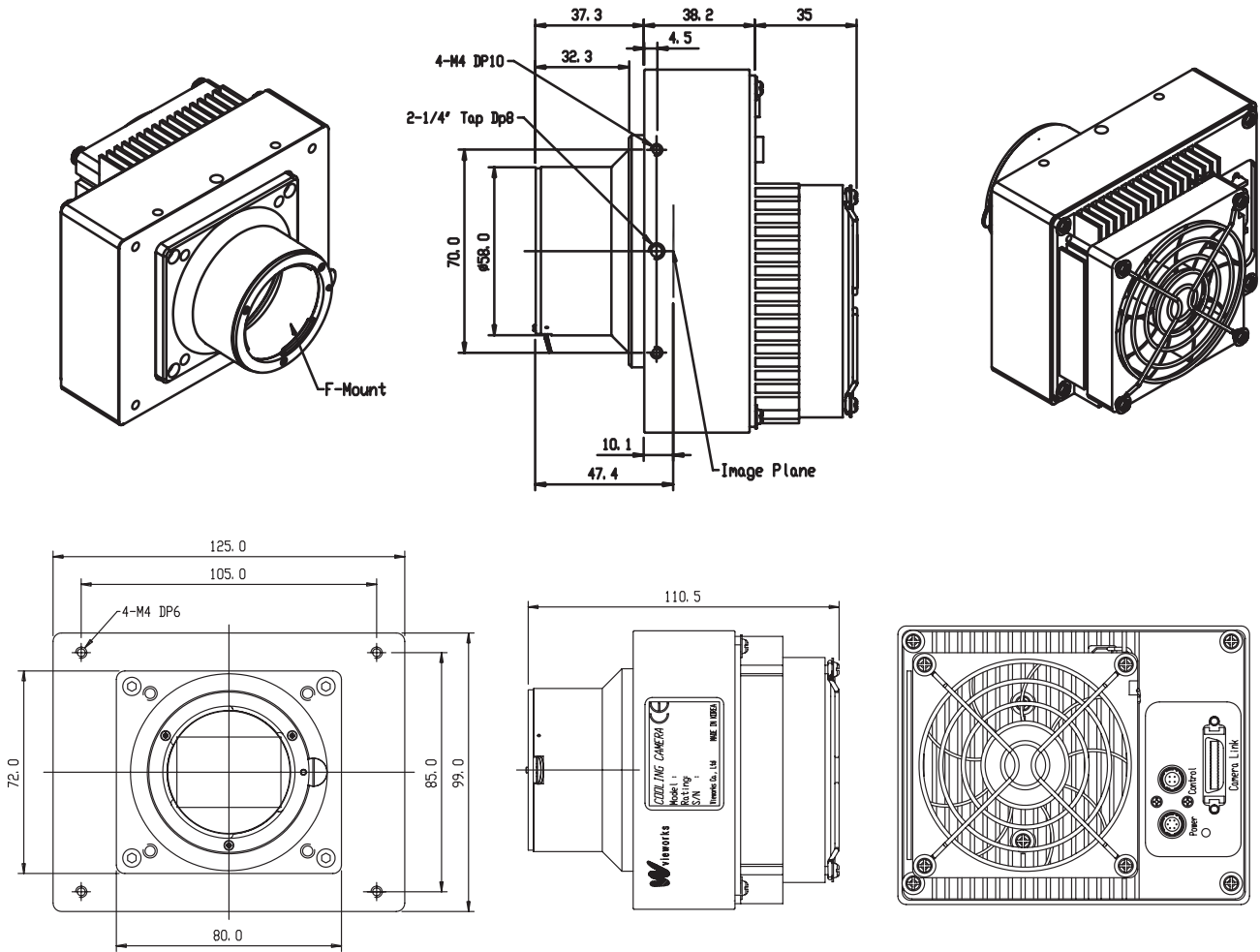


1 : Trigger IN+, 2 : Trigger IN-  
3 : Strobe OUT- (GND), 4 : Strobe OUT+  
(HR10A-7R-4SB)

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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VMCB-VP01-R001EN



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ISO-9001, ISO-13485

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