



vieworks

VX-29MG

AERIAL IMAGING / SURVEILLANCE CAMERA



The VX Series cameras are ideal for aerial imaging and ground surveillance applications which require Photographic Quality resolution and easy-to-use system integration. The VX-29M camera incorporates a 29 million pixel interline transfer CCD with resolution of $6,576 \times 4,384$. Taking pictures with this camera is made easy with features such as: auto exposure, auto gain, auto focus, lens aperture control, and several innovative features to manage network bandwidth when connecting multiple cameras together on a gigabit Ethernet network.

Main Features

- * 29 Megapixel Resolution (Truesense Imaging IT Progressive)
- * Auto Exposure, Auto Gain, Auto Aperture Controls
- * Auto Focus
- * Canon-EF Adapter Control
- * Smear Correction
- * Flexible Binning
- * Internal frame buffer
- * IEEE 802.3 (pause frame control)
- * Inter-Packet Delay
- * User Adjustable back focus
- * Field Upgradable Firmware
- * Pixel Defect Correction
- * Excellent anti-blooming and anti-smear

Applications

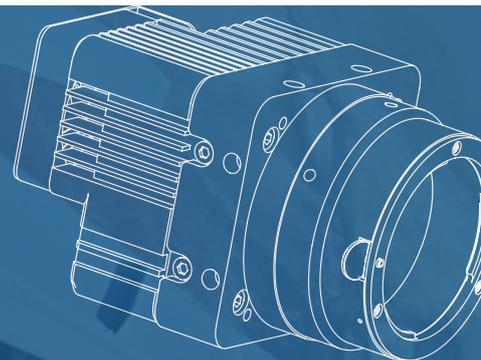
- * Aerial Imaging
- * Ground Surveillance
- * Research and Scientific Imaging

machinevision.vieworks.com



VX-29MG

AERIAL IMAGING / SURVEILLANCE CAMERA

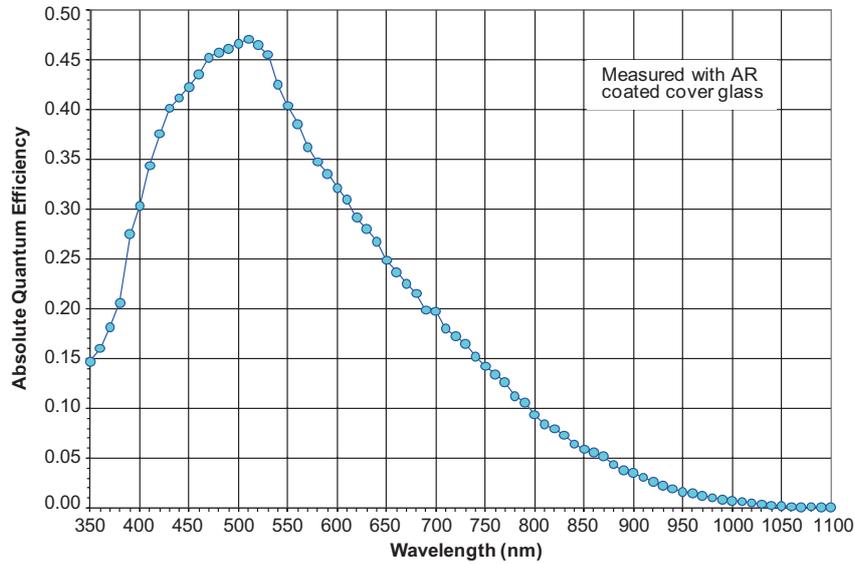


Specifications

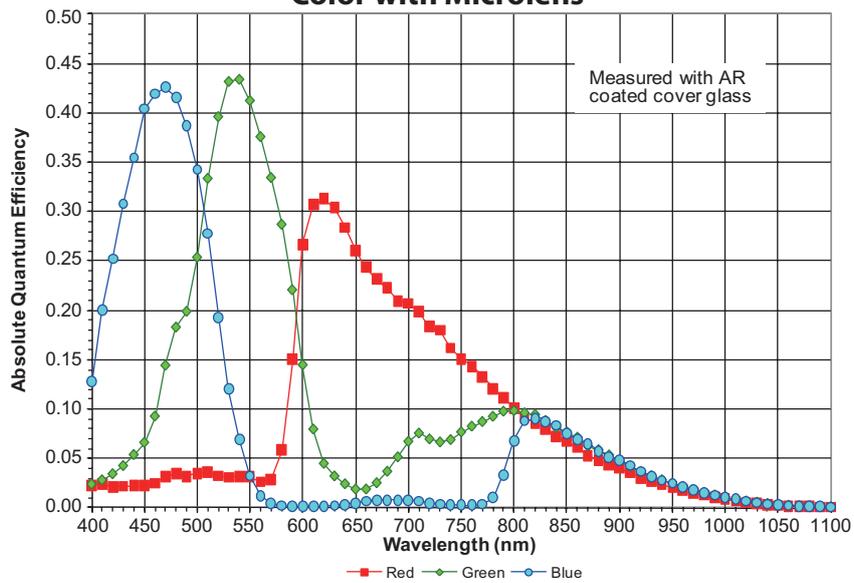
Model	VX-29MG	
Resolution (H × V)	6576 × 4384, 28.8M	
Sensor Type	Truesense Imaging KAI 29050	
Sensor Size (Optical Format)	35 mm	
Sensor Type	Progressive Scan Interline Transfer CCD	
Pixel Size	5.5 μm × 5.5 μm	
Sensor Output	1 or 2 Tap	
Pixel Data Format	8/10/12 bit	
Output Format	Mono	Mono8, Mono10/12 packed
	Color	Bayer8, Bayer10/12 packed
Interface	Gigabit Ethernet	
Electronic Shutter	Global Shutter	
Shutter Speed	46/1,000,000 ~ 7 sec	
Partial Scan (Max. Speed)	8.8 fps at 500 Lines	
Binning	×1, ×2, ×3, ×4, ×8 (Horizontal and Vertical Independent)	
Smear	-100 dB (Enhanced Correction Supported)	
Image Correction	G = 1.0, Knee Control User defined Look Up Table (LUT)	
Black Offset	Adjustable (0 ~ 127 LSB at 12 bit, 256 steps)	
Analog Gain	VGA Gain	0 ~ 32 dB, 900 steps
	CDS Gain	-3.0, 0.0, +3.0, +6.0 dB
Digital Gain	×1 ~ ×64 (1/1024 step)	
Max. Frame Rate (40 MHz)	2.3 fps (dual) / 1.2 fps (single)	
Data Output Pixel Clock Speed	30/40 MHz	
Trigger Mode	Free-Run ,Timed Exposure, Pulse Width Exposure, Double Exposure	
Dynamic Range	> 64 dB	
Dimension(W×H×L)/Weight	74 mm × 65 mm × 103 mm / 550 g (with F-mount) 74 mm × 65 mm × 101 mm / 550 g (with Canon-EF adapter)	
Temperature	Operating : -35°C ~ 60°C, Storage : -40°C ~ 70°C	
Vibration / Shock	10G (20 ~ 200 Hz) XYZ / 70G 10 ms	
Lens Mount	F-mount or Interface for Canon-EF adapter	
Power	10 ~ 15 V DC MAX. 10 W	
API SDK	Vieworks Imaging Solution 6.X	

Quantum Efficiency Curves

Monochrome with Microlens



Color with Microlens



Ordering Scheme

VX - 29MG - M 2 A0

Series
VX Series

Sensor Resolution
29M - 29 Megapixels

Interface
G - Gigabit Ethernet

Sensor Options
A0 - Truesense Imaging

Frame Rate
2 - 2.3 fps

Mono / Color
M - Monochrome
C - Color

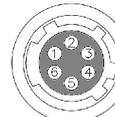
Connector Specification

Power



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

Control



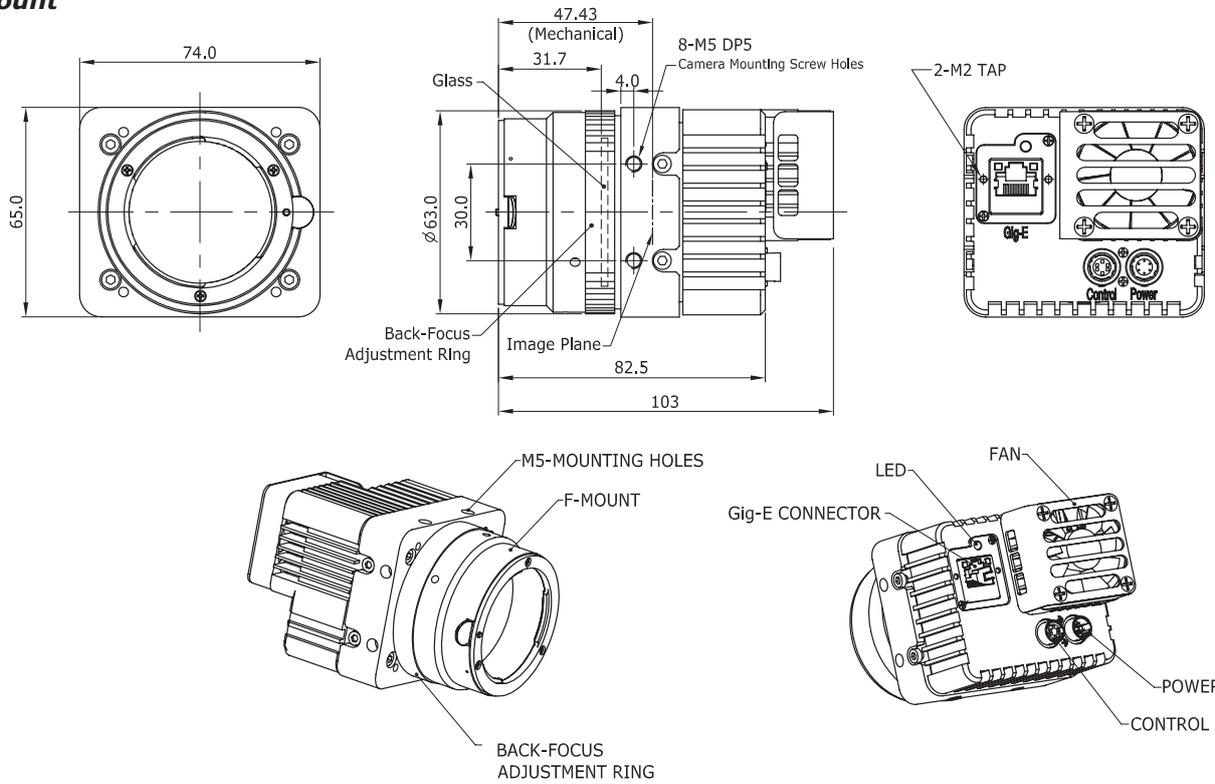
1: Trigger IN+, 2: Trigger IN-
3: Strobe OUT, 4: DC GND
5: RS-232 RX←, 6: RS-232 TX→
(HR10A-7R-6SB)

Connectors on camera body

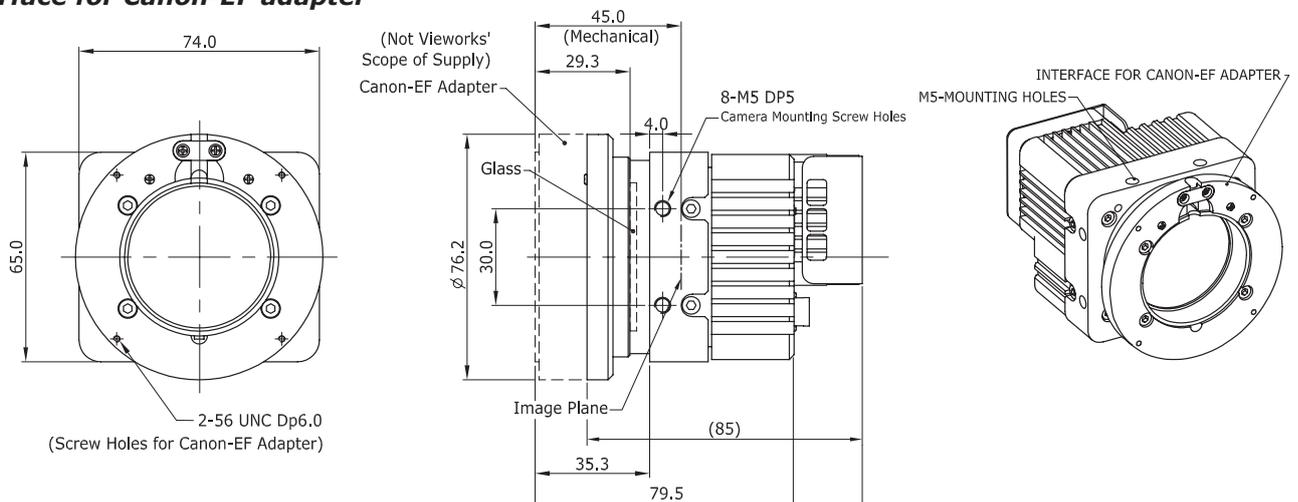
Mechanical Dimensions

Unit : mm

F-mount



Interface for Canon-EF adapter



For more information please contact local distributor or visit our website at www.vieworks.com

Reproduction in whole or in part without written permission is prohibited. Vieworks Co., Ltd. is not responsible for any technical or typographical errors and reserves the right to make changes to products, specifications and documentation without prior notice.

RA11-125-002



vieworks

ISO-9001, ISO-13485

Corporate Headquarters

Vieworks Co., Ltd. # 604 Suntechcity II, 307-2 Sangdaewon-dong, Jungwon-gu, Seongnam-si, Gyeonggi-do, 462-736 South Korea
tel +82-70-7011-6161 fax +82-31-737-4936 e-mail sales@vieworks.com website machinevision.vieworks.com