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VL-8KC-M 80

VL-8KDC-M 80

VL-16KC-M 40

HIGH SENSITIVITY & HIGH SPEED LINE SCAN CAMERA



VL Series offers two different high resolution models with 8k and 16k CMOS sensors delivering greater speed and more sensitivity than ever before. The VL-16KC model delivers a maximum line rate of 40 kHz. Even higher line rate, up to 77 kHz can be achieved using the VL-8KC/8KDC camera.

All cameras have exposure control with 100x anti-blooming. This camera series is ideal for demanding applications such as flat panel display inspection, printed circuit board inspection, and high-performance document scanning.

**VIEWORKS**

# VL-8KC / VL-8KDC / VL-16KC

HIGH SENSITIVITY & HGH SPEED LINE SCAN CAMERA

## Main Features

- \* CMOS Line Scan
- \* Up to 77kHz at 8k Resolution or up to 40kHz at 16k Resolution
- \* CMOS Dual Line Scan Technology (VL-8KDC)
- \* 100x Anti-blooming
- \* Exposure Control
- \* Pre-emphasis Function
- \* Programmable User Setting Commands

## Applications

- \* Flat Panel Display Inspection
- \* Printed Circuit Board Inspection
- \* High Performance Document Scanning
- \* Printing and Packaging System

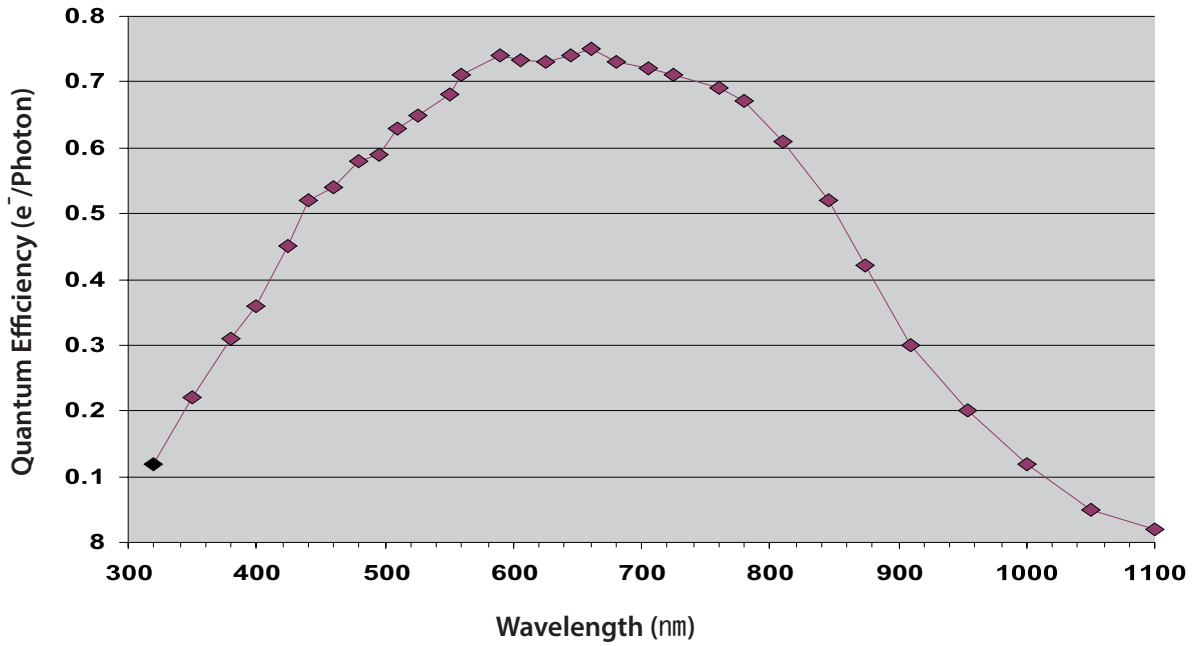
## Specifications

Model	VL-8KC-M 80	VL-8KDC-M 80	VL-16KC-M 40
Resolution (H × V)	8192 × 1	8192 × 2	16384 × 1
Sensor (Awaiba)	DR-8k-7	DR-2x8k-7	DR-16k-3.5
Sensor Type	Linear CMOS		
Pixel Size	7.0 μm × 7.0 μm	7.0 μm × 7.0 μm	3.5 μm × 3.5 μm
Sensor Output	2, 4 or 8 Tap		
Interface	Camera Link (Base / Medium / Full)		
Max. Line Rate	77 kHz	77 kHz	40 kHz
Exposure Time (0.01 μs step)	2.00 μs – 10000.00 μs		
Pixel Data Format	8 / 10 / 12 bit (12 bit supported in 2 and 4 Tap)		
Data Output Pixel Clock Speed	85 MHz		
Dual Line Technology	N/A	Supported	N/A
Acquisition Mode	Single Line	Single Line / Dual Line	Single Line
Image Direction	N/A	CC3 or Programmable	N/A
Trigger Mode	Free-Run, External Sync, External Sync Converter		
Dynamic Range	66 dB	66 dB	64 dB
Gamma Correction	User Defined Lookup Table (LUT)		
Black Level	Adjustable (0 ~ 2048 LSB at 12 bit)		
Digital Gain	×1.00 ~ ×32.00		
Max. Cable Length	10 m (@ 85 MHz, Standard Camera Link Cable)		
Lens Mount	M72 × 0.75 (Sensor to Camera Front: 12 mm)		
Dimension / Weight	80 mm × 80 mm × 54 mm / 420 g		
Temperature	Ambient Operating: 0°C ~ 40°C (Housing: 0°C ~ 60°C), Storage: -40°C ~ 70°C		
Power	8 ~ 28 V DC, Max. 8 W		
Configuration Software	Configurator		

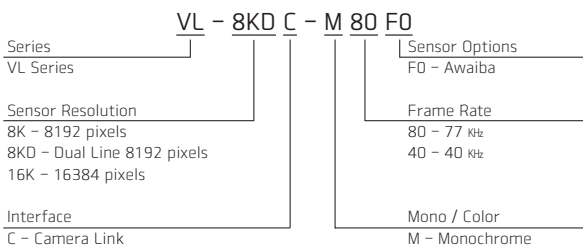
# VL-8KC / VL-8KDC / VL-16KC

HIGH SENSITIVITY & HIGH SPEED LINE SCAN CAMERAS

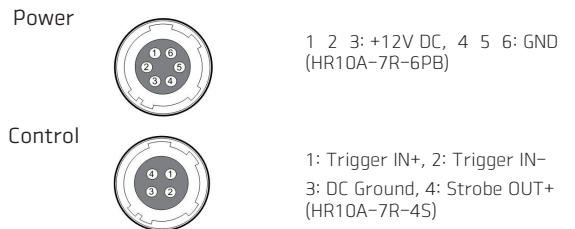
## Quantum Efficiency Curves



## Ordering Scheme



## Connector Specification



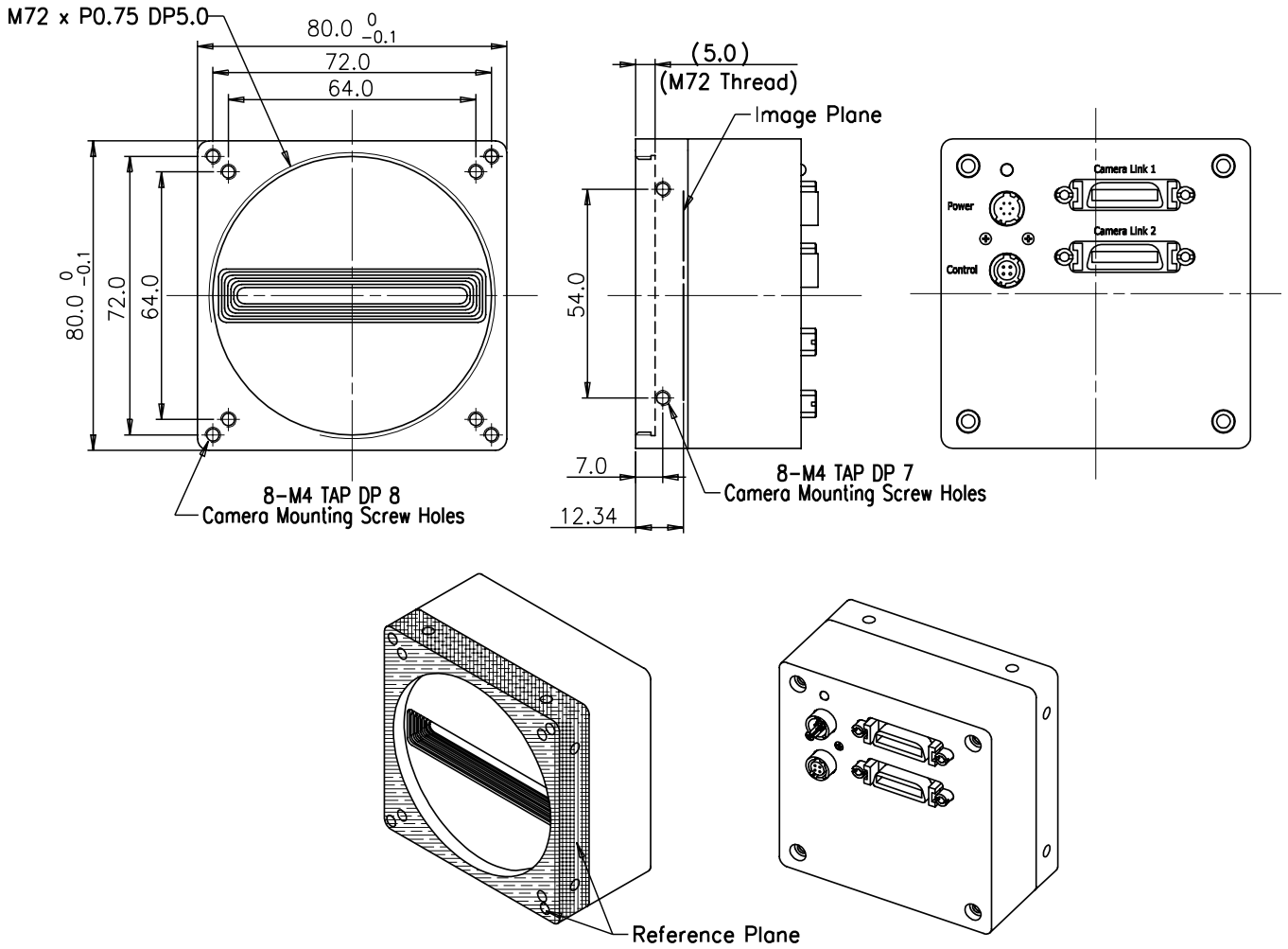
Connectors on camera body

# VL-8KC / VL-8KDC / VL-16KC

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## Mechanical Dimensions

Unit: mm



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RA14-13A-005

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