

VT Series

M42 Mount based TDI Line Scan Cameras with the GigE Interface



The VT-3K7G, VT-4K5G and VT-6K3.5G, the new hybrid Time Delayed Integration (TDI) line scan cameras equipped with the GigE interface, provide faster line rates and higher sensitivity than existing line scan cameras. With hybrid TDI line scan technology combining the strengths of both CCD and CMOS image sensors, the VT-3K7G-E38A-32 camera features up to 35 kHz line rates at 3k resolution and 32× greater sensitivity.

Even superior resolution and sensitivity, up to 18 kHz line rates at 6k resolution and 256× greater sensitivity can be achieved using the VT-6K3.5G-H19A-256 camera. Featured with high speed and high sensitivity, these cameras are ideal for demanding applications such as flat panel inspection, wafer inspection, printed circuit board inspection, and high-performance document scanning.

VT-3K7G / VT-4K5G / VT-6K3.5G

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Main Features

- M42-mount based 3k / 4k / 6k TDI Line Scan Cameras
- GigE Interface
- Bidirectional Operation with up to 256 TDI Stages
- Exposure Control
- Advanced DSNU and PRNU Correction
- Trigger Rescaler and Strobe Output Control

Applications

- Flat Panel Display Inspection
- PCB Inspection
- Machine Vision Inspection
- Microscopy and Metrology

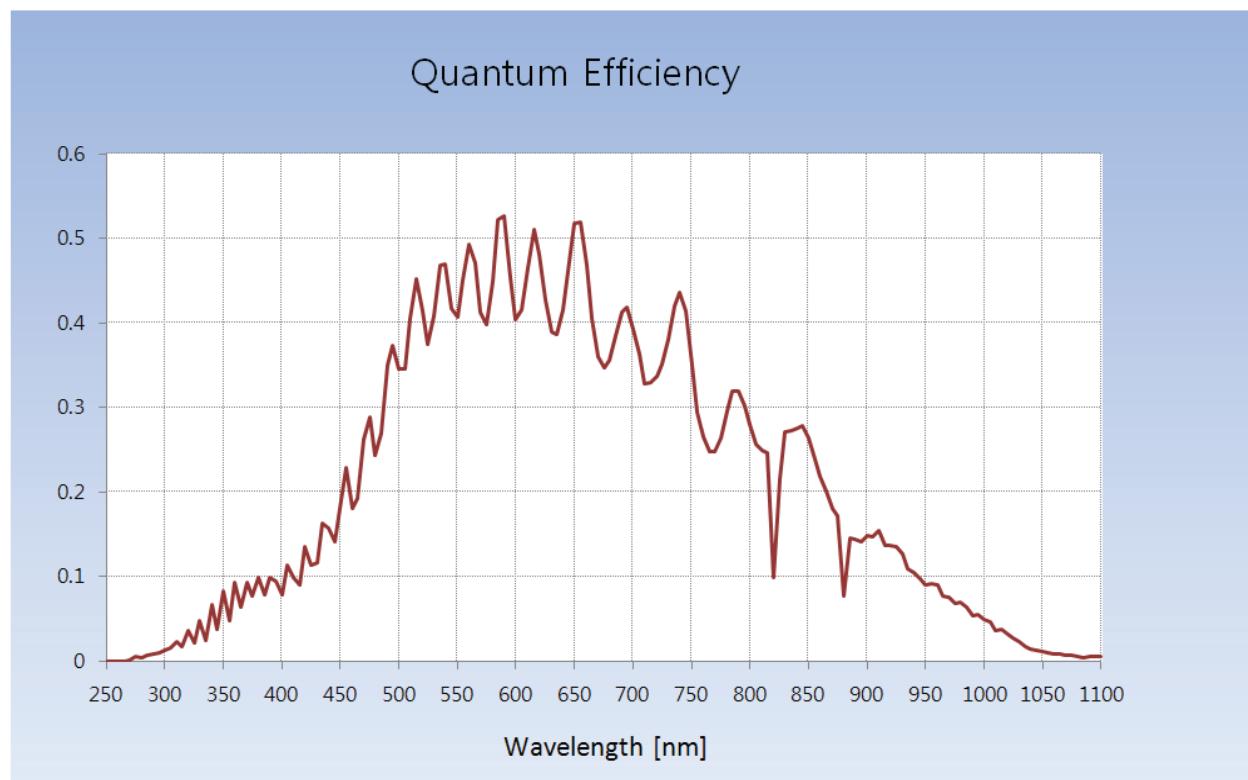
Specifications

Model		VT-3K7G- E38A-32	VT-3K7G- H38A-128	VT-4K5G- E26A-64	VT-4K5G- H26A-256	VT-6K3.5G- E19A-64	VT-6K3.5G- H19A-256
Resolution (H × V)		3200 × 32	3200 × 128	4640 × 64	4640 × 256	6560 × 64	6560 × 256
Sensor		Hybrid TDI Line Scan					
Pixel Size		7.0 μm × 7.0 μm		5.0 μm × 5.0 μm		3.5 μm × 3.5 μm	
Interface		GigE					
Max. Line Rate		35 KHz		25 KHz		18 KHz	
Min. Line Rate		1 KHz					
Pixel Format		8/10/12 bit					
TDI Stages		32	32/64/96/128	64	64/128/192/256	64	64/128/192/256
Trigger Synchronization		Free-Run, External					
Throughput		0.12 Gpix/s					
Gamma Correction		User Defined LUT (Lookup Table)					
Black Level Control		-255 ~ 255 at 8 bit					
Gain Control		Analog Gain: 1×, 2×, 3×, 4× / Digital Gain: 1.0× ~ 8.0×					
Lens Mount		M42 × 1 mm (C or F-mount available upon request)					
Dimension/Weight		60 mm × 60 mm × 36 mm, 223 g					
Temperature		Ambient Operating: 0°C ~ 50°C (Housing: 10°C ~ 50°C), Storage: -40°C ~ 70°C					
Power	External	10 ~ 30 V DC					
	Dissipation	Typ. 3.5 W		Typ. 4.0 W		Typ. 4.5 W	
Compliance		CE, FCC, KC, UKCA		CE, FCC, KC			
API SDK		Vieworks Imaging Solution 7.X					

VT-3K7G / VT-4K5G / VT-6K3.5G

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Quantum Efficiency Curves

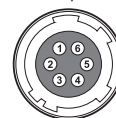


Ordering Scheme

Series	VT - 6K 3.5 G - H 19 A - 256	Sensor Options
VT Series		A - Viewworks
Sensor Resolution		Max. TDI Stages
3K - 3200 pixels		32 - 32 stages
4K - 4640 pixels		64 - 64 stages
6K - 6560 pixels		128 - 128 stages
		256 - 256 stages
Pixel Size		Max. Line Rate
3.5 - 3.5 μm		19 - about 18 μs
5.0 - 5.0 μm		26 - about 25 μs
7.0 - 7.0 μm		38 - about 37 μs
Interface		Sensitivity
G - Gigabit Ethernet		H - Hyper
		E - Enhanced

Connector Specification

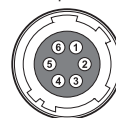
Power Input Receptacle



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

4, 5, 6: GND

Control I/O Receptacle for GigE



1: Trigger IN1+
3: Strobe Out
5: Trigger IN2+
(HR10A-7R-6SB)

2: Trigger IN1-
4: DC Ground
6: Trigger IN2-

Connectors on camera body

VT-3K7G / VT-4K5G / VT-6K3.5G

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Mechanical Dimensions

Unit: mm

