

# VT-4K5X-E300A-64 VT-4K5X-H300A-256

High Speed & High Sensitivity 4k TDI Line Scan Cameras



**CoaXPress®**

The VT-4K5X-E300A-64 and VT-4K5X-H300A-256, the new hybrid Time Delayed Integration (TDI) line scan cameras equipped with four CoaXPress channels, 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-4K5X-E300A-64 camera delivers line rates of up to 300 kHz at 4k resolution with 64× higher sensitivity. Even superior sensitivity, up to 4640 pixel resolution at a maximum line rate of 300 kHz and 256× greater sensitivity can be achieved using the VT-4K5X-H300A-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.

## VIEWWORKS

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

# VT-4K5X-E300A-64 / VT-4K5X-H300A-256

High Speed & High Sensitivity 4k TDI Line Scan Cameras

## Main Features

- 4k Hybrid TDI Line Scan
- CoaXPRESS Interface up to 300 kHz at 25 Gbps using 4 CH
- Bidirectional Operation with up to 256 TDI Stages
- Advanced DSNU and PRNU Correction
- Trigger Rescaler and Strobe Output Control
- GenICam Compatible – XML based Control

## Applications

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

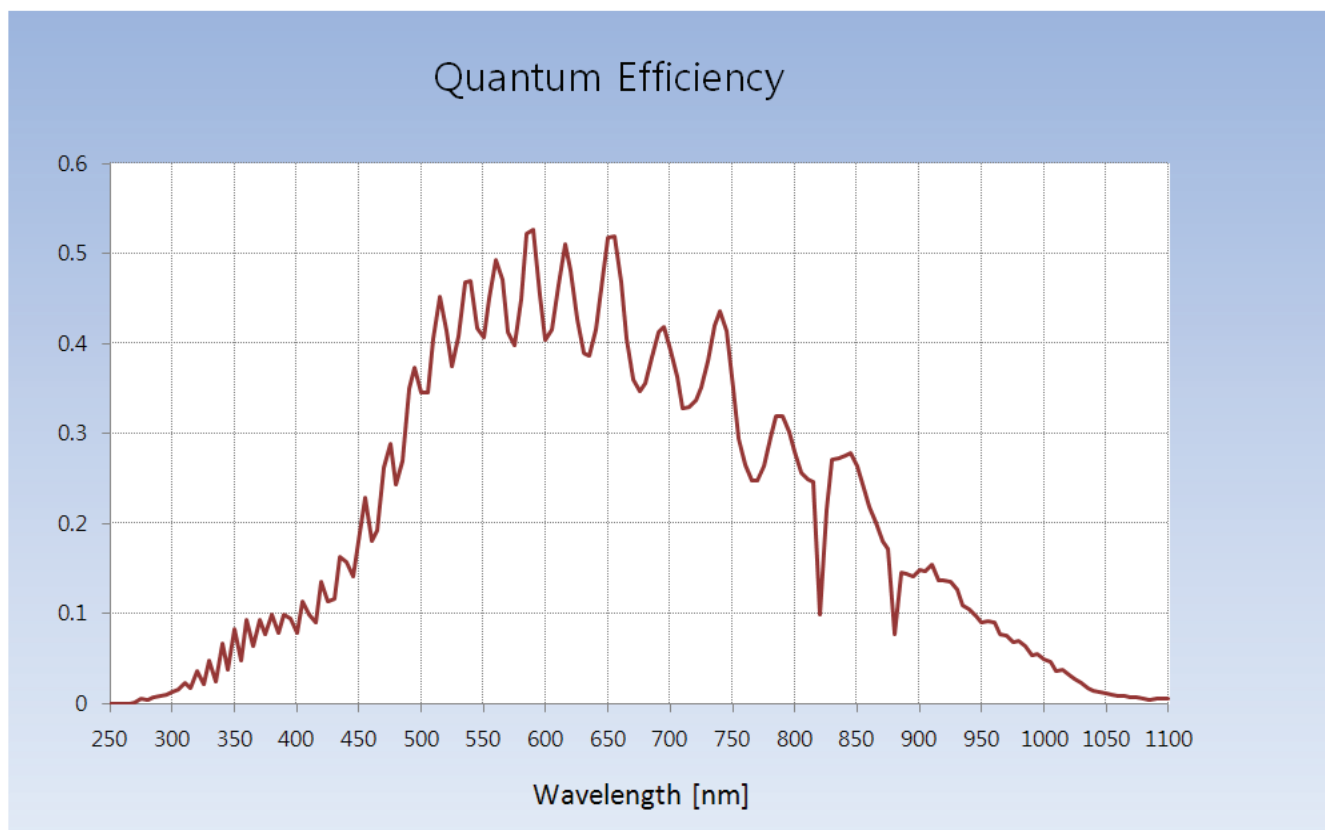
## Specifications

Model		VT-4K5X-E300A-64	VT-4K5X-H300A-256
Resolution (H × V)		4640 × 64	4640 × 256
Sensor		Hybrid TDI Line Scan	
Pixel Size		5.0 μm × 5.0 μm	
Interface		CoaXPRESS (CXP-6, 4 CH)	
Max. Line Rate		300 kHz	
Max. Line Rate (2 × 2 Binning)		257 kHz	
Min. Line Rate		1 kHz	
Pixel Data Format		8 / 10 / 12 bit	
TDI Stages		64	64 / 128 / 192 / 256
Trigger Synchronization		Free-Run, External or CoaXPRESS	
Throughput		1.39 Gpix/s	
Gamma Correction		User Defined Lookup Table (LUT)	
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	
Dimension / Weight		60 mm × 60 mm × 37 mm / 245 g	
Temperature		Ambient Operating: 0°C ~ 40°C (Housing: 10°C ~ 50°C), Storage: -40°C ~ 70°C	
Power	External	10 ~ 30 V DC	
	Dissipation	Typ. 5.5 W	
	PoCXP	24 V DC, Minimum of one PoCXP cable required	
Compliance		CE, FCC, KC	
API SDK		Vieworks Imaging Solution 7.X	

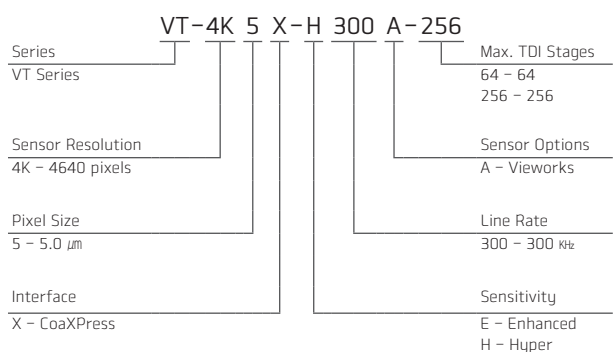
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## Quantum Efficiency



## Ordering Scheme



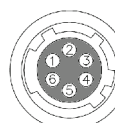
## Connector Specification

### Power



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

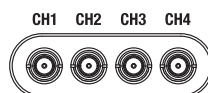
### Control



1: Trigger IN  
3: GND  
5: NC  
(HR10A-7R-6SB)

2: Direction IN  
4: GND  
6: Strobe Out

### Data Transfer / Communications



CH1: Master Connection  
(75  $\Omega$ , DIN 1.0/2.3)

Connectors on camera body

# VT-4K5X-E300A-64 / VT-4K5X-H300A-256

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## Mechanical Dimensions

Unit: mm

