

VTS-4K5X-H300A-256

High Speed & High Sensitivity 4k TDI Line Scan Cameras



VTS-4K5X-H300A-256, the new hybrid Time Delayed Integration (TDI) line scan camera equipped with four CoaXPress channels, provide faster line rates and higher sensitivity than existing line scan cameras. With hybrid TDI line scan technology combining with BSI(Backside-Illuminated) sensor, the VTS-4K5X-H300A-256 camera delivers line rates of up to 300kHz at 4k resolution with 256× higher sensitivity. Even superior sensitivity, up to 4640 pixel resolution at a maximum line rate of 300kHz and 256× greater sensitivity can be achieved using the VTS-4K5X-H300A-256 camera. Featured with high speed and high sensitivity, this camera is ideal for demanding applications such as flat panel inspection, wafer inspection, printed circuit board inspection, and high-performance document scanning.

VIEWWORKS

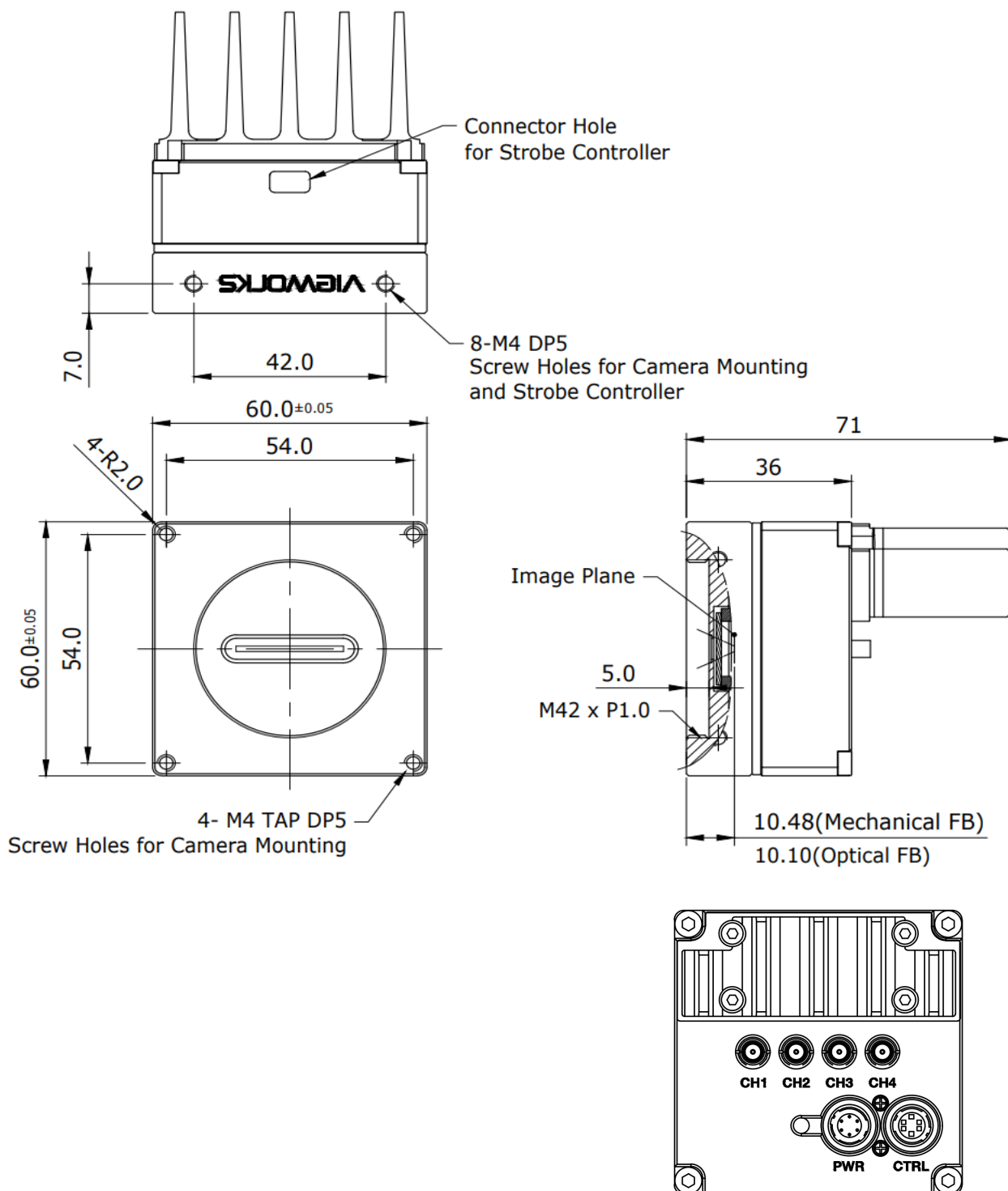
vision.viewworks.com

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Mechanical Dimensions

Unit: mm



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Main Features

- BSI (Backside Illuminated) Sensor
- CoaXPRESS Interface up to 300KHz at 25Gbps using 4CH
- 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

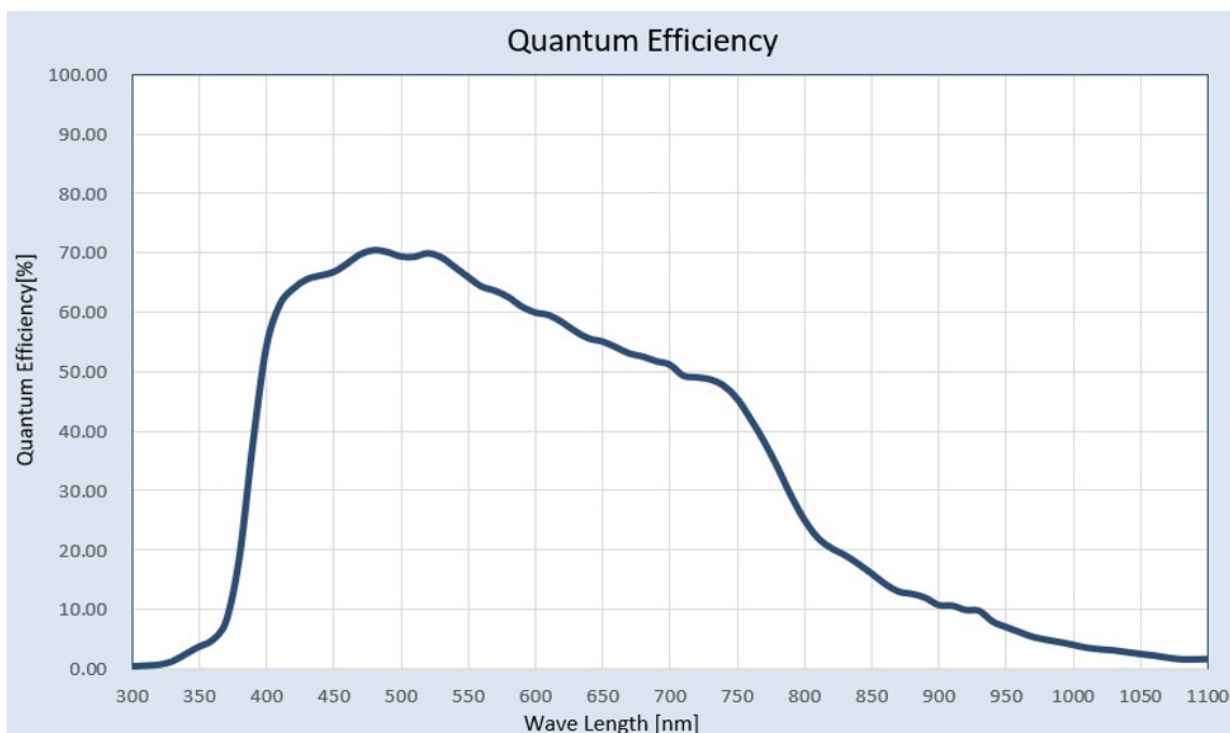
Specifications

Model		VTS-4K5X-H300A-256
Resolution (H × V)		4640 × 256
Sensor		BSI (Backside Illuminated) Sensor
Pixel Size		5.0 μm × 5.0 μm
Interface		CoaXPRESS (CXP1.0), 4 CH
Max. Line Rate		300KHz
		2 x 2 Binning: 257KHz
		3 x 3 Binning: 225KHz
		4 x 4 Binning: 200KHz
Min. Line Rate		1KHz
Pixel Data Format		8 / 10 / 12 bit
TDI Stages		64 / 128 / 192 / 256
Trigger Synchronization		Free-Run, External Trigger Signal, CoaXPRESS
Throughput		1.39 Gpix/s
Gamma Correction		User Defined Lookup Table (LUT)
Black Level Control		-256 ~ 255 at 8 bit
Gain Control		Analog Gain: 1×, 2×, 3×, 4× / Digital Gain: 1.0× ~ 32.0×
Dynamic Range		63dB
Lens Mount		M42 x 1mm
Dimension / Weight		60 mm × 60 mm × 71 mm / 280 g
Temperature		Ambient Operating: 0°C ~ 40°C (Housing: 10°C ~ 55°C)
		Storage: -40°C ~ 70°C
Power	External	11 ~ 24 V DC
	Dissipation	Typ. 6.0 W / Max. 8.4 W
	PoCXP	24 V DC, Minimum of one PoCXP cable required
Compliance		CE, FCC, KC
API SDK		Vieworks Imaging Solution 7.X

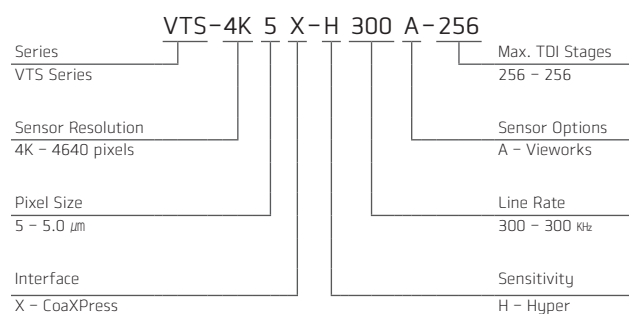
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Quantum Efficiency



Ordering Scheme



Connector Specification

Power



1, 2, 3: +11 ~ 24V DC
4, 5, 6: GND
(HR10A-7R-6PB)

Control



1: Trigger IN
2: Direction IN
3: GND
4: GND
5: NC
6: Strobe Out
(HR10A-7R-6SB)

Data Transfer / Communications



CH1: Master Connection
(75 Ω , DIN 1.0/2.3)

Connectors on camera body