

VTs-16K5X2-H300A-256-UV

High Speed & High Sensitivity 16k TDI Line Scan Cameras



VTs-16K5X2-H300A-256-UV, the new Time Delayed Integration (TDI) line scan camera equipped with 4 CoaxPress channels, provides faster line rates and higher sensitivity than existing line scan cameras. Utilizing hybrid TDI line scan technology combined with a BSI (Backside-Illuminated) sensor, the VTs-16K5X2-H300A-256-UV camera delivers up to 16,384-pixel resolution at a maximum line rate of 300 kHz, with 256× sensitivity. Featuring high speed and high sensitivity, this camera is ideal for demanding applications such as flat panel inspection, wafer inspection, PCB inspection, and advanced document scanning.

VIEWORKS

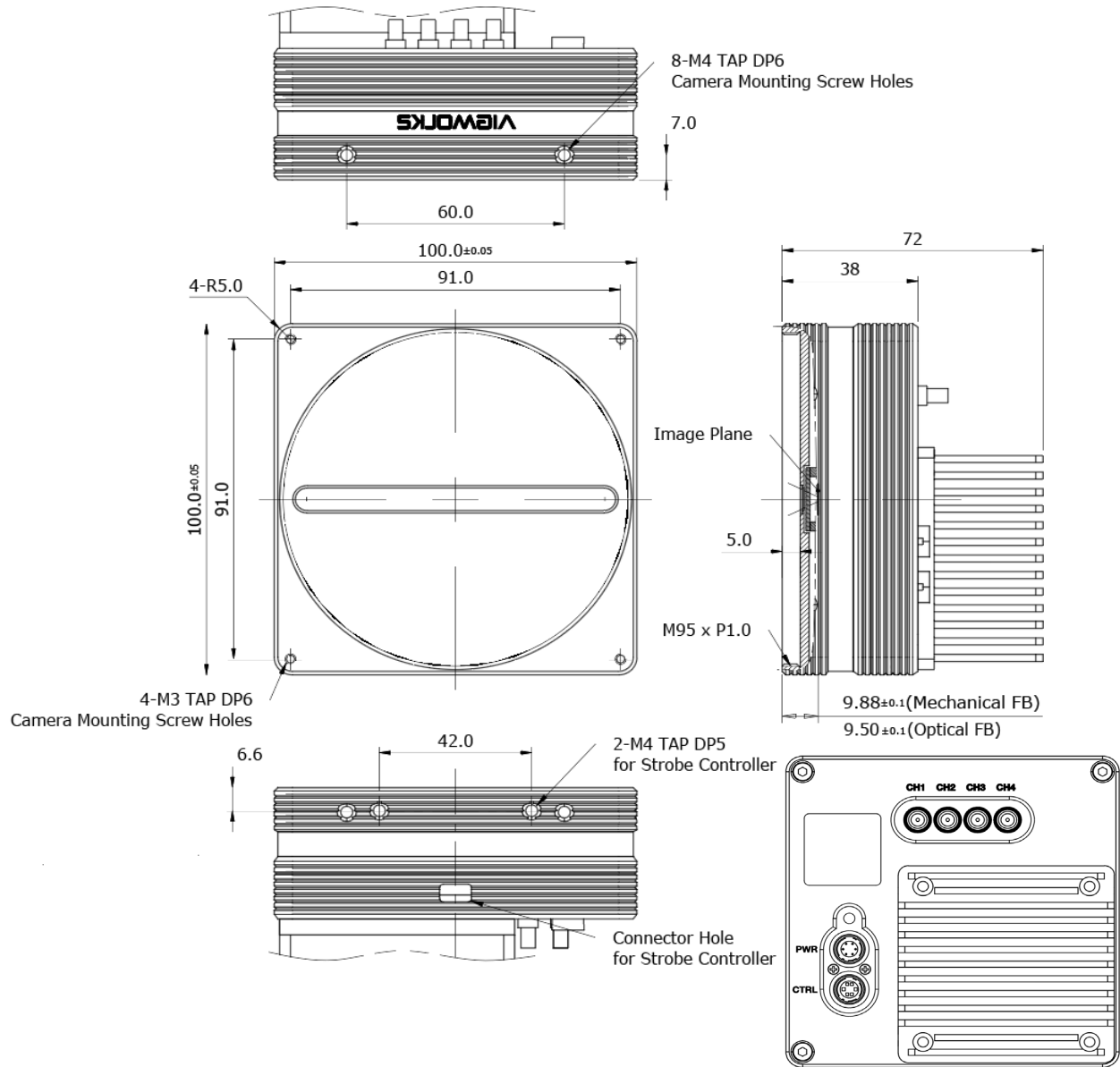
vision.vieworks.com

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Mechanical Dimensions

Unit: mm



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Main Features

- BSI (Backside Illuminated) Sensor
- CoaXPress Interface up to 300 kHz at 50 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
- Increased QE for UV range

Applications

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

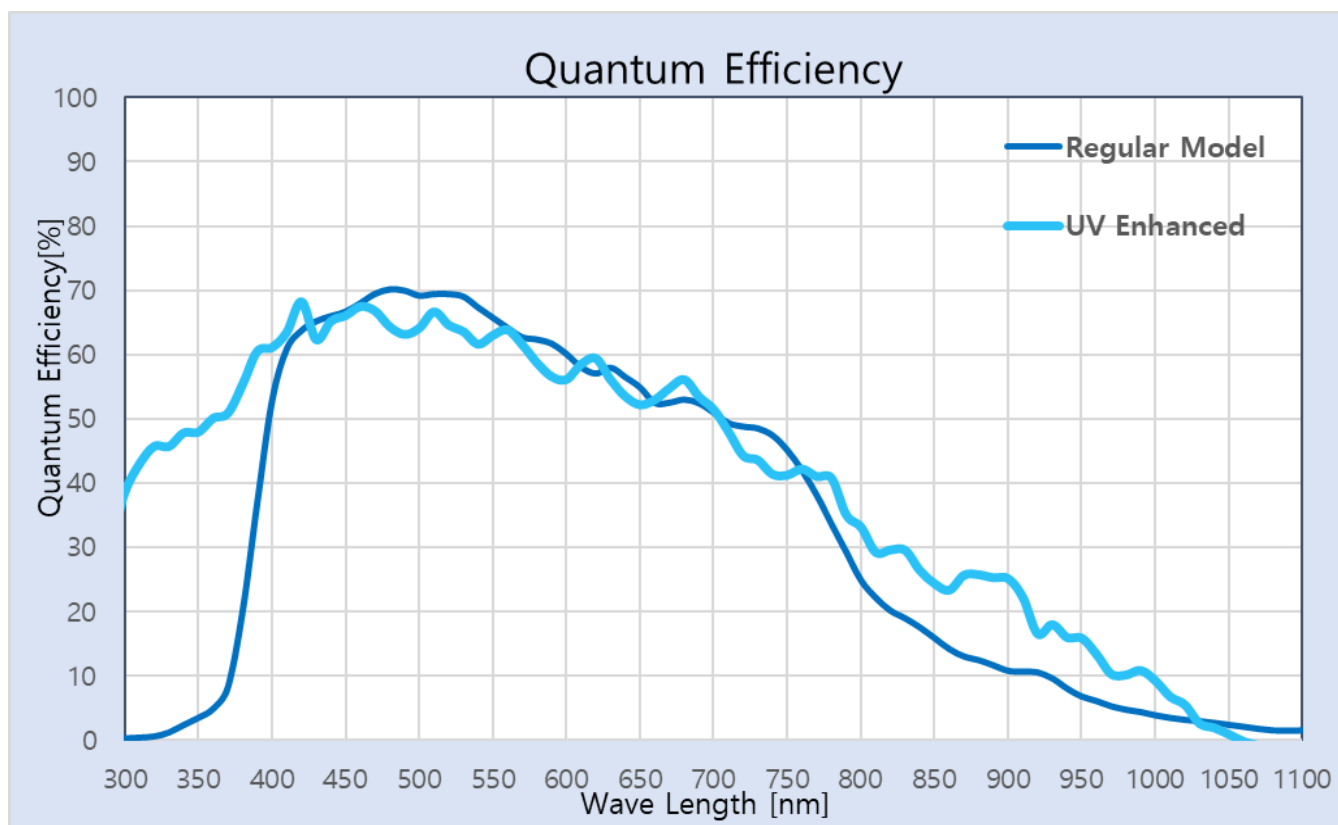
Specifications

Model	VTS-16K5X2-H300A-256-UV	
Resolution (H × V)	16384 × 256	
Sensor	BSI (Backside Illuminated) Sensor	
Pixel Size	5.0 μm × 5.0 μm	
Interface	CoaXPress 2.0 (CXP-12, 4 channels)	
Max. Line Rate	300kHz (ROI 16,000 pixels)	
	2 x 2 Binning: 257kHz	
	3 x 3 Binning: 225kHz	
	4 x 4 Binning: 200kHz	
Max. Line Rate (2 × 2 Binning)	257 kHz	
Min. Line Rate	1 kHz	
Pixel Data Format	8 / 10 / 12 bit	
TDI Stages	64 / 128 / 192 / 256	
Trigger Mode	Free-Run, External Trigger Signal, CoaXPress	
Throughput	4.8 Gpix/s	
Gamma Correction	User Defined Lookup Table (LUT)	
Black Level Control	-256 to 255 at 8bit	
Gain Control	Analog Gain : x1.0 to x4.0 / Digital Gain : x1.0 to x32.0	
Dynamic Range	63dB	
Lens Mount	M95 × 1 mm	
Dimension / Weight	100 mm × 100 mm × 72 mm / 886 g	
Temperature	Ambient Operating: 0°C to 40°C (Housing: 10°C to 50°C), Storage: -40°C to 70°C	
Power	External	+11 to 24 V DC
	Dissipation	Typ. 18.0W / Max. 23.0W
	PoCXP	24 V DC, Minimum of two PoCXP cables required
Compliance	CE, FCC, KC	
API SDK	Vieworks Imaging Solution 7.X	

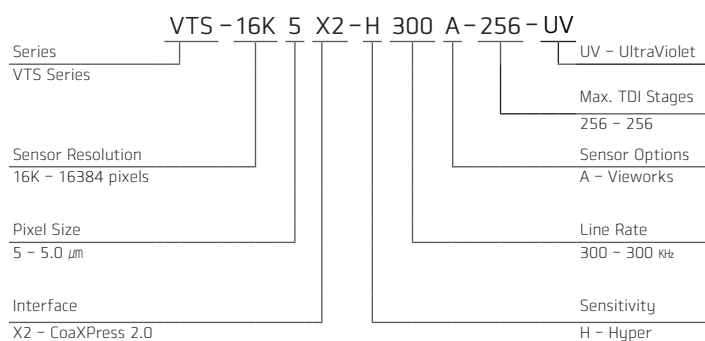
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Quantum Efficiency

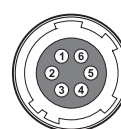


Ordering Scheme



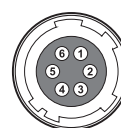
Connector Specification

Power



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

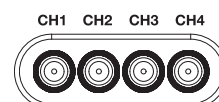
Control



1: Line0
3: GND
5: Line3
(HR10A-7R-6SB)

2: Line1
4: GND
6: Line2

Data Transfer / Communications



CH1: Master Connection

75 Ω , Micro-BNC(HD-BNC)

Connectors on Camera Body