

VTs-16K5X2-H300A-256

High Speed & High Sensitivity 16k TDI Line Scan Cameras



CoaXPress®

VTs-16K5X2-H300A-256, the new 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 with BSI(Backside-Illuminated) sensor, up to 16384 pixel resolution at a maximum line rate of 300 kHz and 256X sensitivity can be achieved using the VTs-16K5X2-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.

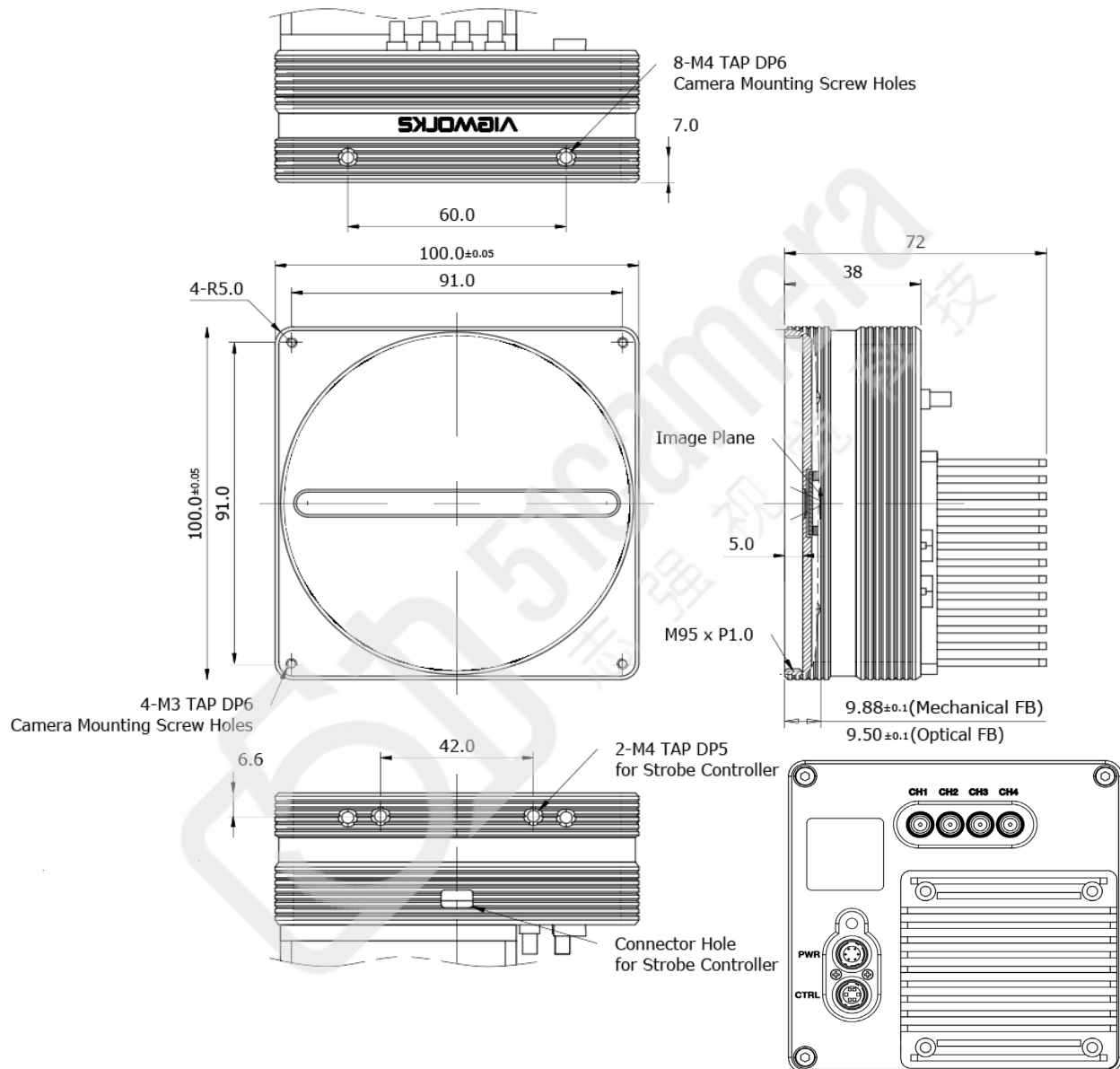
VIEWORKS

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

Applications

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

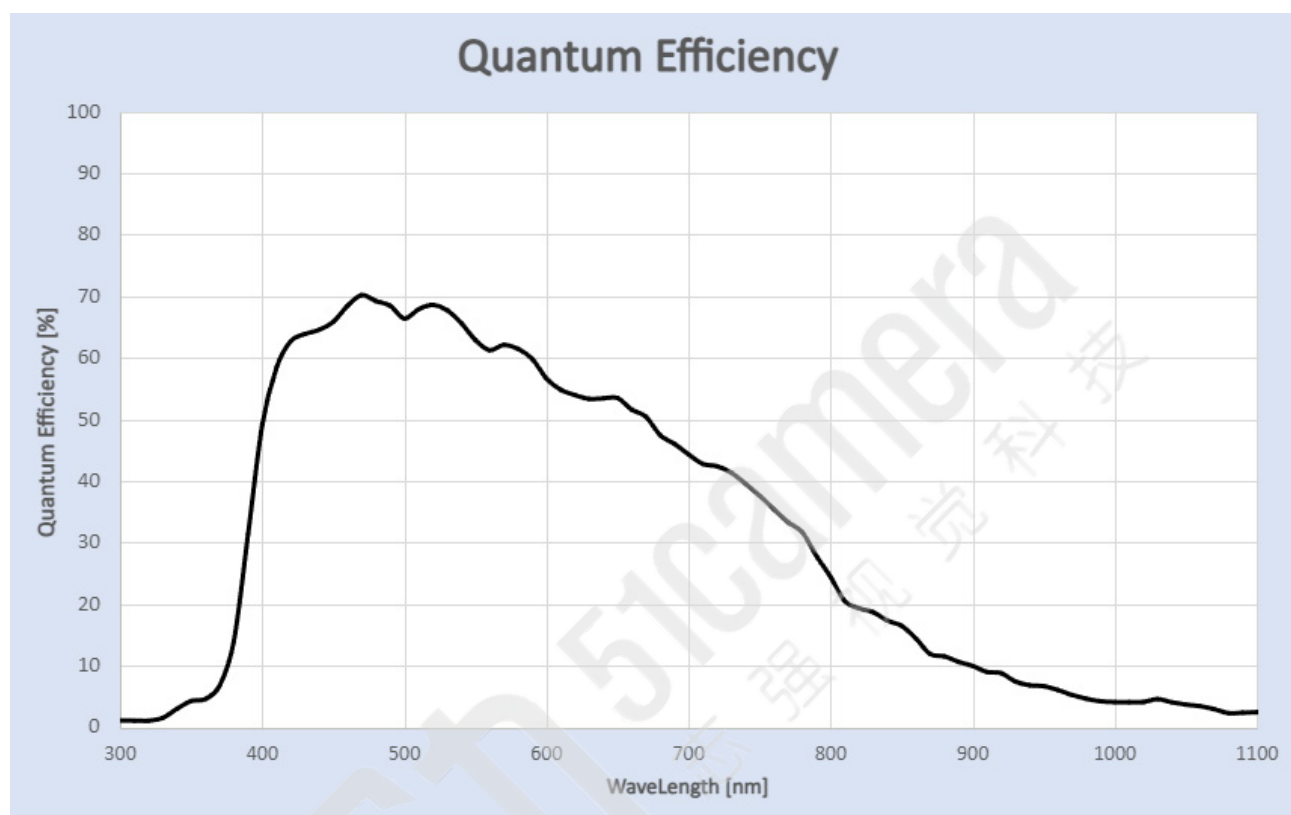
Specifications

Model	VTs-16K5X2-H300A-256	
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 ~ 255 at 8bit	
Gain Control	Analog Gain : x1.0~x4.0 / Digital Gain : x1.0 ~ 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 ~ 40°C (Housing: 10°C ~ 50°C), Storage: -40°C ~ 70°C	
Power	External	+11 ~ 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

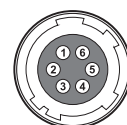


Ordering Scheme

VTs-16K5X2-H300A-256					
Series	16K	5	X2-H	300	A-256
VTs Series					Max. TDI Stages 256 ~ 256
Sensor Resolution					Sensor Options A - Vieworks
16K - 16384 pixels					
Pixel Size					Line Rate 300 ~ 300 kHz
5 ~ 5.0 μ m					
Interface					Sensitivity H - Hyper
X2 - CoaXPress 2.0					

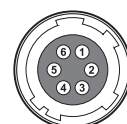
Connector Specification

Power



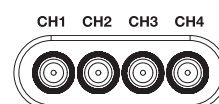
1, 2, 3: +11 ~ 24V DC
4, 5, 6: GND
(HR10A-7R-6PB)

Control



1: Line0 2: Line1
3: GND 4: GND
5: Line2 6: Line3
(HR10A-7R-6SB)

Data Transfer / Communications



CH1: Master Connection

75 Ω , Micro-BNC(HD-BNC)

Connectors on Camera Body