

VTS-9K5X2-H550I-256-UV

High Speed & High Sensitivity 9k TDI UV Camera
with BSI Image Sensor



CoaxPress®

The VTS-9K5X2-H550I-256-UV camera, the new Time Delayed Integration (TDI) camera with a Back-Side Illuminated (BSI) image sensor by charge-domain CMOS technology, provides faster line rates and higher sensitivity than existing TDI cameras.

With the state-of-the-art BSI sensor from Gpixel, the camera acquires images of 9k resolution with 256x higher sensitivity, and for higher than that, the camera also supports the HDR feature using both photosensitive bands, 256 stages and 32 stages respectively.

Featured with high speed and high sensitivity, the camera is ideal for demanding applications such as semiconductor inspection, PCB(Printed Circuit Board) inspection, flat panel display inspection, and fluorescence imaging.

VIEWWORKS

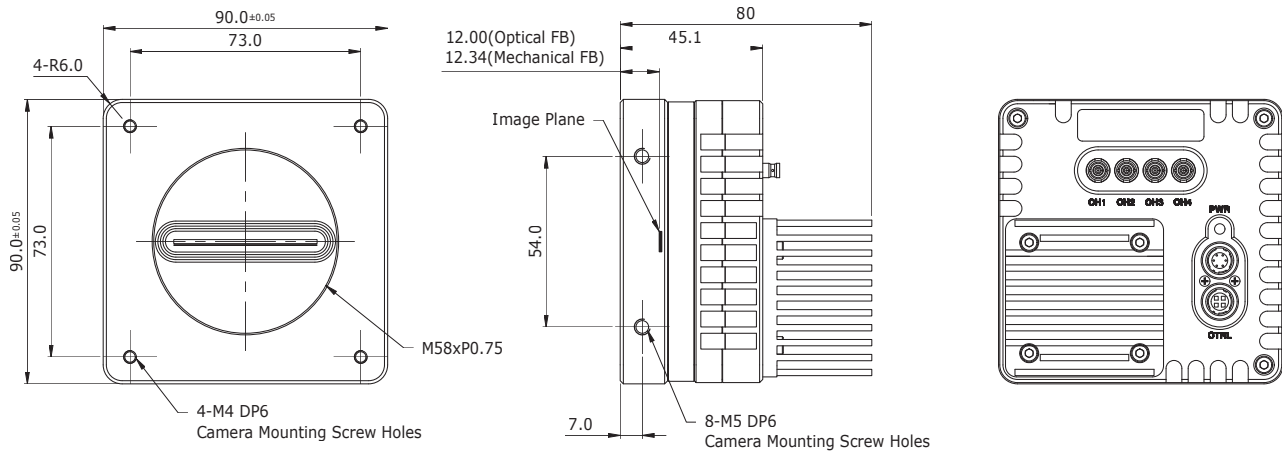
vision.viewworks.com

VTs-9K5X2-H550I-256-UV

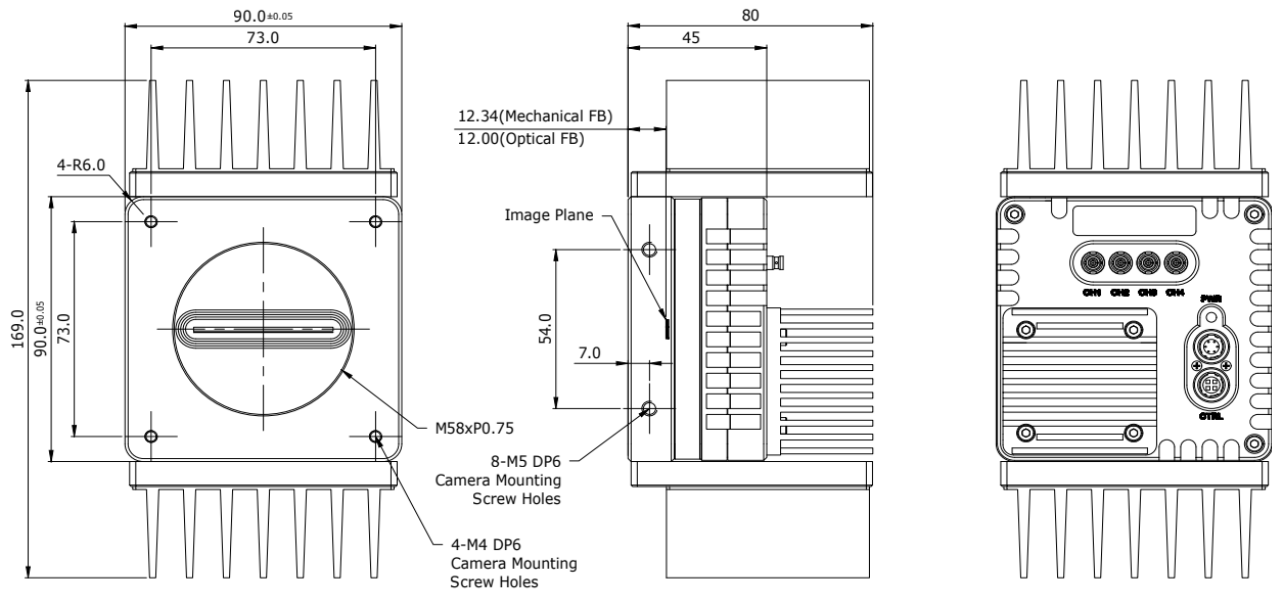
High Speed & High Sensitivity 9k TDI UV Camera

Mechanical Dimensions

- VTs-9K5X2 UV Camera



- VTs-9K5X2 UV Camera with two additional heatsinks (Heatsink Size: 87mm x 39.5mm x 78.5mm)



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Main Features

- 9k TDI, BSI(Back-Side Illuminated), UV enhanced
- CoaXPress Interface up to 543 kHz at 50 Gbps using 4 CH
- Bidirectional Operation with up to 256 TDI Stages in a Single Band, or 32 TDI Stages in a Dual Band
- Advanced DSNU and PRNU Correction
- Strobe Output Control
- GenICam Compatible – XML based Control

Applications

- Semiconductor Inspection
- Printed Circuit Board Inspection
- Flat Panel Display Inspection
- Fluorescence Imaging

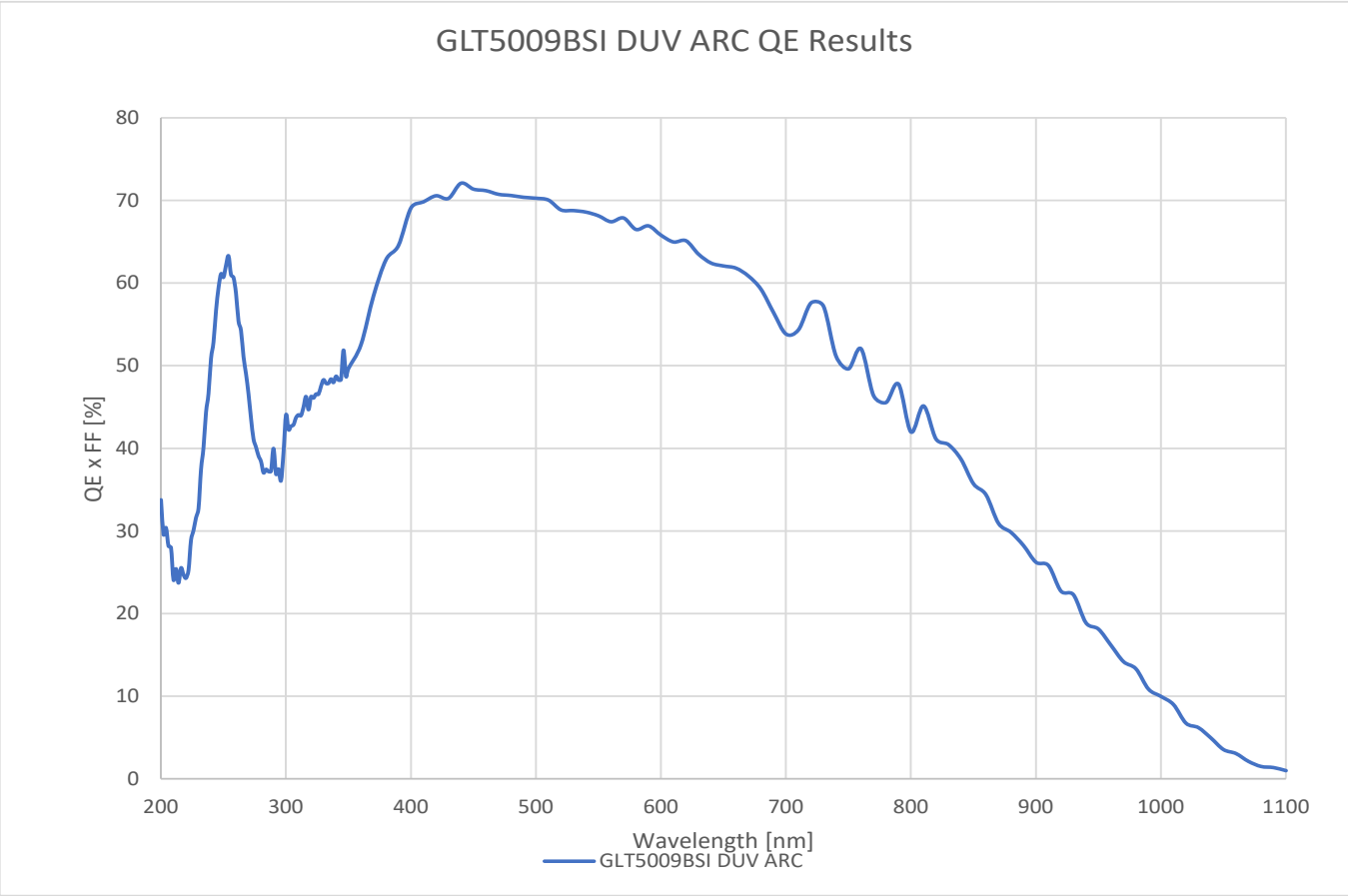
Specifications

Model		VTS-9K5X2-H550I-256-UV	
Photosensitive Bands		Single Band (No HDR)	Dual Band (HDR)
Resolution (H × V)		9056 × 256	9056 × (256 + 32)
Sensor		Back-Side Illuminated Image Sensor (GLT5009BSI), UV enhanced	
Interface		CoaXPress 2.0 (CXP-12, 4 channels)	
Pixel Size		5.0 μm × 5.0 μm	
Sensor Size (diagonal)		45.36 mm × 1.28 mm	45.36 mm × (1.28 + 0.16) mm
Max. Line Rate		8 bit: 543 kHz 10 bit: 435 kHz 12 bit: 300 kHz	8 bit: 271.5 kHz × 2 10 bit: 217.5 kHz × 2
Min. Line Rate		30 kHz	
Pixel Data Format		Mono 8/10/12 bit	Mono 8/10 bit
TDI Stages		4/8/16/32/64/96/128/160/192/224/240/248/252/256	
		OFF	2/4/8/16/24/28/30/32
Trigger Synchronization		Free-Run, External or CoaXPress 2.0	
Throughput		4.9 Gpixels	
Gamma Correction		User Defined Lookup Table (LUT)	
Black Level Control		-256 ~ 255 at 8 bit	
Gain Control	Analog Gain	2.0× ~ 8.0×	
	Digital Gain	1.0× ~ 32.0×	
Lens Mount		M58 × 0.75 mm	
Dimension / Weight		90 mm × 90 mm × 80 mm / 800 g	
Temperature		Ambient Operating: 0°C ~ 40°C (Housing: 10°C ~ 55°C), Storage: -40°C ~ 70°C	
Power	External	11 ~ 24 VDC	
	Dissipation	Typ. 22.0W / Max. 25.0W	
	PoCXP	24 V DC, Minimum of Two PoCXP Cables Required	
Compliance		CE, FCC, KC	
API SDK		Viewworks Imaging Solution 7.X	

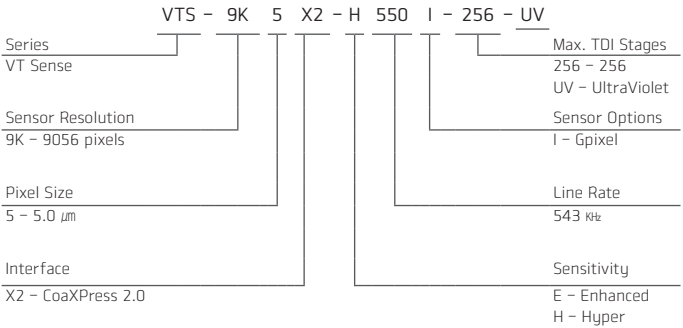
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Quantum Efficiency



Ordering Scheme



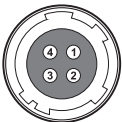
Connector Specification

Power



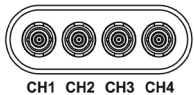
1 2 3: +12 VDC, 4 5 6: GND
(HR10A-7R-6PB)

Control



1: Trigger IN, 2: Direction IN
3: DC Ground, 4: Strobe OUT+
(HR10A-7R-4S)

Data Transfer / Communications



CH1: Master Connection

75 Ω , Micro-BNC(HD-BNC)

Connectors on Camera Body