

# IMPERX

## TIGER

### INTELLIGENT CAMERA SERIES

## T3340

### CCD 8 MP

Camera Link®



#### Imperx: T3340

The Tiger T3340 CCD camera is an advanced, ruggedized, and economical digital camera providing 3296 x 2472 resolution, frame rates up to 21 fps. The camera features programmable image resolution, frame rates, gain, offset, external triggering, strobe outputs, transfer function correction, temperature monitoring, and user programmable LUTs, FFC, and Defect Correction Tables. The camera is fully field upgradable with optional forced air cooling available.

#### Specifications

Feature	Description	Feature	Description
<b>Output Interface</b>	Camera Link® Medium w/PoCL®	<b>Data Correction</b>	Bad pixel correction, four 12-bit LUTs, 2 FFC, Black level, Vertical smear
<b>Resolution</b>	3296 (H) x 2472 (V), 3320 (H) x 2496 (V) max	<b>Minimum Illuminations</b>	1 Lux, F/ 1.4
<b>Sensor</b>	ON Semiconductor KAI-08051 Color/Mono/ Sparse CFA	<b>Lens Mount</b>	F-Mount (Default), C-Mount, M42, EOS Canon
<b>Sensor Format</b>	CCD, 4/3"	<b>Supply Voltage Range</b>	12 VDC (6 V – 30 V), 2.5 A inrush
<b>Pixel Size</b>	5.5 microns square	<b>Power Consumption (Ruggedized)</b>	7.8 W
<b>Frame Rate</b>	21 fps	<b>Power Consumption (Industrial)</b>	8.4 W
<b>Dynamic Range</b>	66 dB	<b>Size - Width/Height/Length</b>	69.5 mm (W) x 69.5 mm (H) x 51.5 mm (L) (Ruggedized, no fan) 69.5 mm (W) x 76.3 mm (H) x 51.5 mm (L) (Industrial, with fan)
<b>Output Bit Depth</b>	8-bit, 10-bit, 12-bit	<b>Weight</b>	450g
<b>Noise</b>	10 electrons rms	<b>Vibration, Shock (Ruggedized)</b>	100G (20-200 Hz) XYZ/ 1000G
<b>Analog Gain Control</b>	Manual, Auto (Rug.): 0 – 30 dB (Ruggedized), 0 – 24 dB (Industrial)	<b>Vibration, Shock (Industrial)</b>	20G (20-200 Hz) XYZ / 200G
<b>Black Level Control</b>	Manual, 1024 steps, Auto	<b>Environmental (Ruggedized)</b>	-40 °C to +85 °C Operating, -50 °C to +90 °C Storage
<b>Digital Gain</b>	1x – 4x, 0.001x steps	<b>Environmental (Industrial)</b>	-10 °C to +60 °C Operating, -50 °C to +90 °C Storage
<b>Digital Offset</b>	-512 to +511, 1 step increments	<b>Humidity</b>	10% to 90% non-condensing
<b>AEC/AGC</b>	Yes (Ruggedized)	<b>MTBF</b>	TBD
<b>White Balance</b>	Manual, Auto, Off	<b>Regulatory</b>	FCC Part 15 Class A, CE, RoHS
<b>Shutter Speed</b>	1/100,000 to 1/21 s (nom) in 1 µs steps		
<b>Exposure Control</b>	Auto (Ruggedized), External, Internal		
<b>Long Integration</b>	Up to 16 seconds		
<b>Regions of Interest (ROI)</b>	2 ROIs (Ruggedized) or 1 ROI (Industrial). Any line to any line, any pixel to any pixel		
<b>Binning H/V</b>	1x, 2x, 4x (Independent for H & V)		
<b>Trigger Inputs</b>	External, Pulse generator, Software, Computer		
<b>Trigger Options</b>	Edge, Pulse width, Trigger filter, Trigger delay, Debounce		
<b>Trigger Modes</b>	Standard, Double, Fast		
<b>External Inputs/Outputs</b>	2 IN (OPTO, LVTTTL) / 2 OUT (OPTO, TTL)		
<b>Strobe Output</b>	2 strobes (Ruggedized) or 1 strobe (Industrial). Programmable position and duration		
<b>Pulse Generator</b>	Yes, programmable		

## Imperx: T3340 Applications

The T3340 incorporates a number of unique features tailored to reduce system complexity, maximize interface bandwidth, and expand the usable operational range.

Aerospace • Satellites • Surveillance • Military and Non-Military Ground Vehicles • Ball Grid Array • Printed Circuit Board Inspection • Motion Analysis • Broadcast Television • Telepresence • Unmanned Aerial Vehicles • Machine Vision • Reconnaissance • Intelligent Traffic Systems • Aerial Imaging • Open Road Tolling Systems • Situational Awareness • Scientific • Particle Velocity

## Absolute Quantum Efficiency

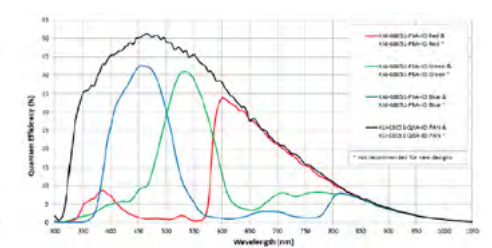
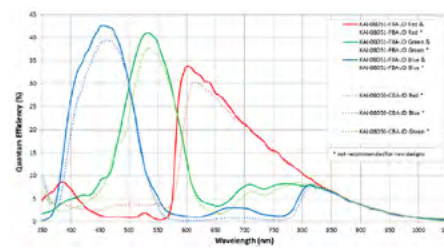
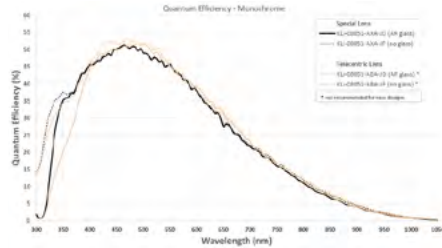
Monochrome with Microlens

KAI-08051

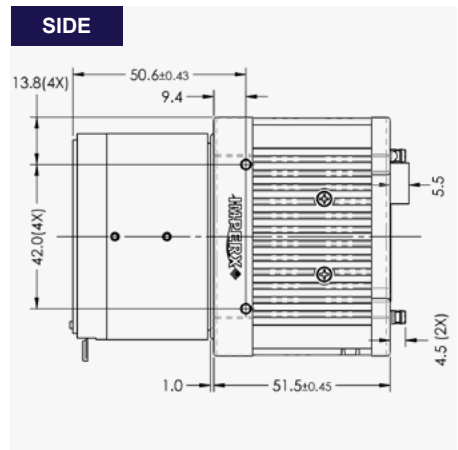
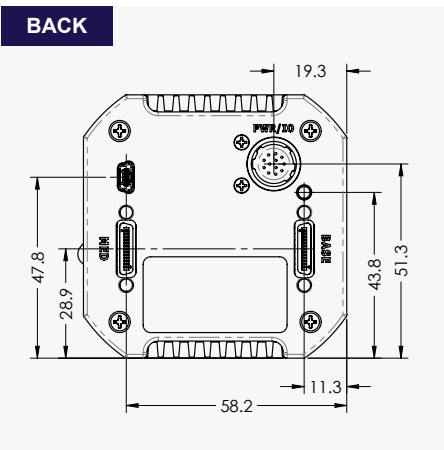
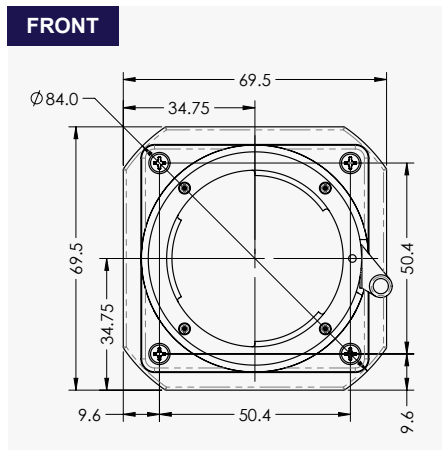
Color (Bayer RGB) with Microlens

KAI-08051

Color (TRUESENSE Sparse CFA) with Microlens KAI-08051



## Dimensions

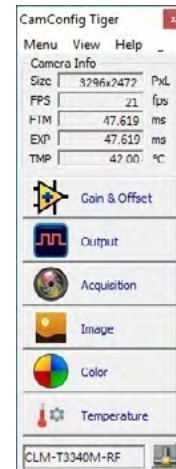


## Ordering Information

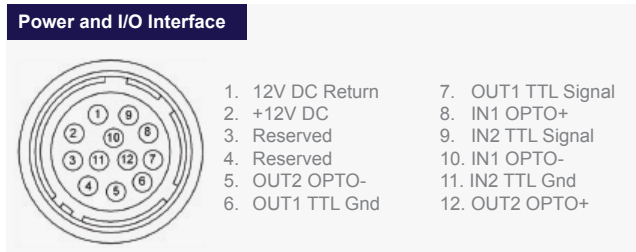
Output Interface
Camera Link Medium (CLM) w/PoCL®
Sensor Types available
Monochrome
Bayer Color
Sparse CFA

Lens Mounts
F-Mount (default) M42
C-Mount EF Canon
Ordering
Ruggedized Industrial
Accessories (Sold separately)
PS12V04A-Power Supply w/ 1 input and 1 output

## Camera Link GUI



## Hirose Connectors



Connector: Hirose HR 10A-10R-12PB(71)

Rev: cl\_t3340\_r2\_2019

Quality Management System ISO 9001:2015 Registered  
 Environmental Management System ISO 14001:2015 Registered  
 DDTC Registered (Directorate of Defense Trade Controls, US Department of State)



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