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 and frame rates up to 21 frames per second. The camera features programmable image resolution, frame rates, gain, offset, external triggering, strobe output, transfer function correction, temperature monitoring, and user programmable and uploadable LUT. The camera is fully field upgradable. Optional active forced air cooling available.

Specifications

Pulse Generator

Yes, programmable

| Feature | Description | Feature | Description |
|---------------------------|--|-------------------------------|---|
| Interfaces available | Camera Link Medium, CoaXPress | Data Corrections | Bad pixel correction, 12-bit LUTs, 2 FFC, black |
| Resolution | 3296 x 2472, 3320 x 2496 max | | level, vertical smear |
| Sensor | ON Semiconductor KAI-08051 color/mono/ | Minimum Illuminations | 1 Lux, F/ 1.4 |
| | Sparse CFA | Lens Mount | F-Mount (Default), C-Mount, M42, EOS Canon |
| Sensor Format | CCD, 4/3" | Supply Input Range | 12VDC (6V - 30V), 1.5 A inrush |
| Pixel Size | 5.5 μm | Power Consumption | 7.5 W (typ) |
| Frame Rate | 21 fps | Size (WxHxL) | 69.5mm x 69.5mm x 51.5mm |
| Dynamic Range | 66 dB | Weight | 450g |
| Bit Depth | 8, 10, 12 bit | Vibration, Shock | 100G (20-200Hz) XYZ/ 1000G |
| Noise | 12 electrons rms | (Ruggedized) | |
| Analog Gain Control | Manual, Auto: 0-36dB | Vibration, Shock | 20G (20-200Hz) XYZ / 200G |
| Black Level Control | Manual, 1024 steps, Auto | (Industrial) | |
| Digital Gain | 1x to 4x, 0.001x steps | Environmental (Ruggedized) | -40°C to +85°C Operating, -50°C to +90°C Storage |
| Digital Offset | -512 to +511 | Environmental | -10°C to +60°C Operating, -50°C to +90°C |
| White Balance | Manual, auto, off | (Industrial) | Storage |
| Shutter Speed | 1/100,000 to 1/5 sec (nom) in 1 µs steps | Humidity | 10% to 90% non-condensing |
| Exposure Control | Manual, Auto, External | MTBF | TBD |
| Long Integration | Up to 16 seconds | Regulatory | FCC Part 15 Class A, CE, RoHS |
| Regions of Interest (ROI) | 2 ROIs, any line to any line, any pixel to any pixel | | |
| Binning H/V | 1x, 2x, 4x (Independent for H & V) | | |
| Trigger Inputs | External, pulse generator, software, computer | | |
| Trigger Options | Edge, pulse width, trigger delay, debounce | | |
| Trigger Modes | Standard, double, fast | | |
| External Inputs/Ouputs | 2 IN (OPTO, LVTTL) / 2 OUT (OPTO, TTL) | | |
| Strobe Output | 2 strobes, programmable position and duration | | |



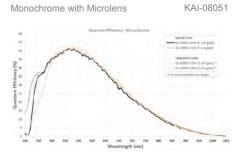
Imperx: T3340 Applications

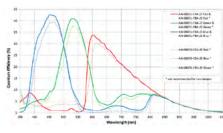
The T3340 incorporates a number of unique features tailored to reduce system complexity, maximize interface bandwidth, and expand the usable operational range.

Color (Bayer RGB) with Microlens

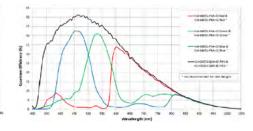
Aerospace • Satellites • Surveillance • Military and Non-Military Ground Vehicles • Ball Grid Array • Printed Circuit Board Inspection Motion Analysis
Broadcast Television
Telepresence
Unmanned Aerial Vehicles
Machine Vision
Reconnaissance
 Intelligent Traffic Systems • Aerial Imaging • Open Road Tolling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

Absolute Quantum Efficiency

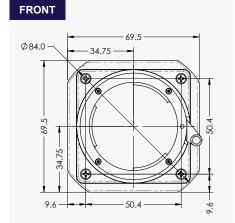


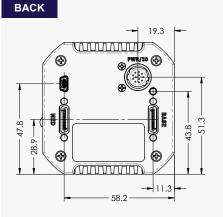


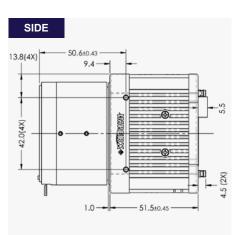
KAI-08051 Color (TRUESENSE Sparse CFA) with Microlens KAI-08051



Dimensions







Ordering Information

| Interface Available | Lens Mounts | | |
|---------------------------|-------------------------------|---|--|
| Camera Link Medium (CLM) | F-Mount (default) | M42 | |
| CoaXPress (CXP) | C-Mount | EF Canon | |
| | Ordering | | |
| Sensor Types available | Ruggedized | Industrial | |
| Monochrome | Accessories (Sold separately) | | |
| Bayer Color Sparse CFA | PS12v04A-Power Sup | PS12v04A-Power Supply w/ 1 input and 1 output | |
| Hirose Connectors | | | |
| Power and I/O Interface | | | |

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OUT1 TTL Signal

IN1 OPTO +

Camera Link GUI

| CamConfig Tiger 🔛 | | | | | |
|-------------------|------|-----|----|--|--|
| Menu View | He | lp | - | | |
| Camera Info | _ | | n. | | |
| Size 3296x2 | 472 | PxL | | | |
| FPS | 16 | fps | | | |
| FTM 270. | 994 | ms | | | |
| EXP 270. | 994 | ms | | | |
| TMP : | 36.6 | °C | | | |
| Gain & Offset | | | | | |
| Cutput | | | | | |
| AEC/AGC | | | | | |
| Image | | | | | |
| Color | | | | | |
| CLM-3340-RL000 | | | | | |



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WWW IMPERX COM

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| ψ. | 4. | Reserved | 10. | IN1 OPTO - |
| ž., | 5. | OUT2 OPTO - | 11. | IN2 TTL Gnd |
| <u>.</u> | 6. | OUT1 TTL Gnd | 12. | OUT2 OPTO + |
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12V DC Return

+12V DC

Connector: Hirose HR 10A-10R-12PB(71) * Not Connected for CXP

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

