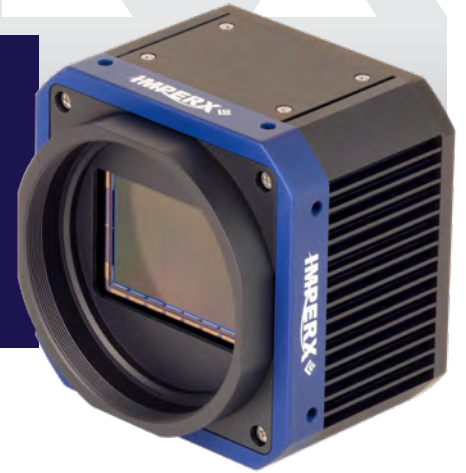


TIGER

INTELLIGENT CAMERA SERIES

T8810 / T8820 CCD 47 MP Camera Link®



Imperx: T8810 / T8820 is an advanced progressive scan, fully programmable CCD camera

The Tiger T8810 / T8820 camera meets application requirements for high quality images, powerful features, and flexibility. The cameras feature the ON Semiconductor KAI-47051 CCD image sensor providing an image resolution of 8856 x 5280. At full resolution, the T8810 delivers up to 3.3 frames per second while the T8820 delivers up to 6.5 frames per second. The camera's 12 bit internal data image processing engine is based on a high-speed, high-density FPGA, enabling a broad standard feature set and easy implementation of demanding imaging applications. Optional active forced air cooling.

Specifications

Feature	Description	Feature	Description
Interfaces available	Camera Link Medium (T8810), Camera Link Full (T8820)	Data Corrections	Bad pixel correction, four 12-bit LUTs, 2 FFC, black level, vertical smear
Resolution	8856 x 5280, 8880 x 5300 max	Minimum Illuminations	1 Lux, F/1.4
Sensor	ON Semiconductor KAI-47051 color/mono/ Sparse CFA	Lens Mount	M72 medium format
Sensor Format	CCD, 57mm	Supply Input Range	12VDC (8V - 30V), 2.0 A inrush
Pixel Size	5.5 µm	Power Consumption	14 W (typ)
Frame Rate	3.3 fps (T8810), 6.5 fps (T8820)	Size (WxHxL)	88mm (W) x 88mm (H) x 59mm (L) Without bezel
Dynamic Range	66 dB	Weight	535g
Bit Depth	8 bit or 10 bit (T8810 & T8820); 12 bits (T8810 only)	Vibration, Shock (Ruggedized)	100G (20-200HZ XYZ) / 1000G
Noise	10 e- RMS	Vibration, Shock (Industrial)	20G (20-200HZ XYZ) / 200G
Analog Gain Control	Manual, Auto: 0-36dB	Environmental (Ruggedized)	-40°C to +85°C Operating, -50°C to +90°C Storage
Black Level Control	0 to 255, 256 steps	Environmental (Industrial)	-10°C to +60°C Operating, -50°C to +90°C Storage
Digital Gain	1.0x to 4.0x, 0.001x steps	Humidity	10% to 90% non-condensing
Digital Offset	-512 to +511	MTBF	TBD
White Balance	Auto, once and manual	Regulatory	FCC Part 15 Class A, CE, RoHS
Shutter Speed	1/100,000 to 1/3 sec (nom) in 1 µs steps		
Exposure Control	Manual, Auto, External		
Long Integration	Up to 16 seconds		
Regions of Interest (ROI)	1 ROI, 2x2 to 8856 x 5280, X&Y offset		
Binning H/V	1x1, 2x2, 4x4		
Trigger Inputs	External, pulse generator, software, computer		
Trigger Options	Edge, pulse width, internal exposure		
Trigger Modes	Standard, fast, Double (PIV)		
External Inputs/Outputs	2 IN (OPTO, LVTTTL) / 2 OUT (OPTO, TTL)		
Strobe Output	2 strobes, programmable polarity, position and duration		
Pulse Generator	Yes, programmable		

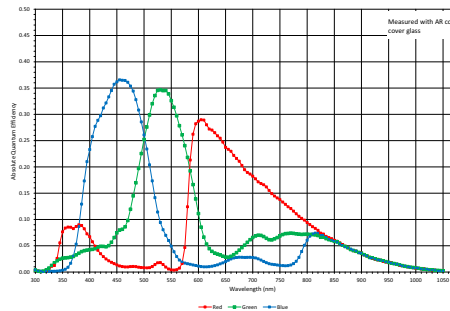
Imperx: T8810 / T8820 Applications

Flat Panel Inspection • Aerial Mapping • Satellites • Persistent Surveillance • Film Scanning • Metrology

Absolute Quantum Efficiency

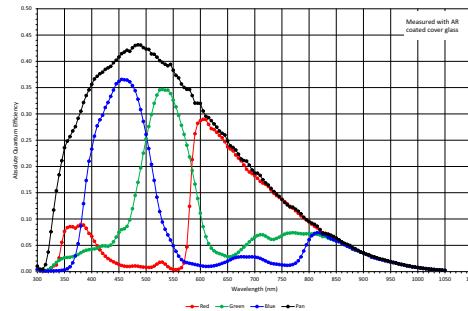
Color (Bayer RGB) with Microlens

KAI-47051



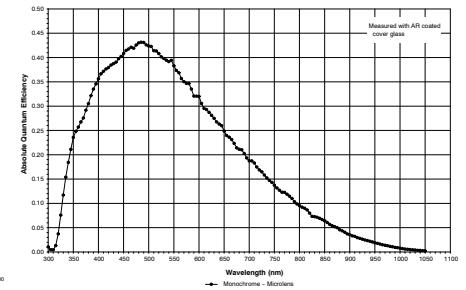
Color (Sparse CFA) with Microlens

KAI-47051

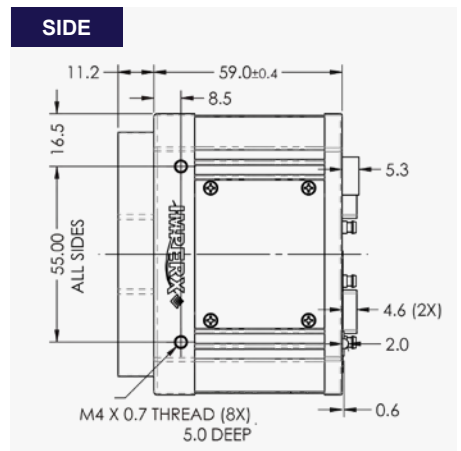
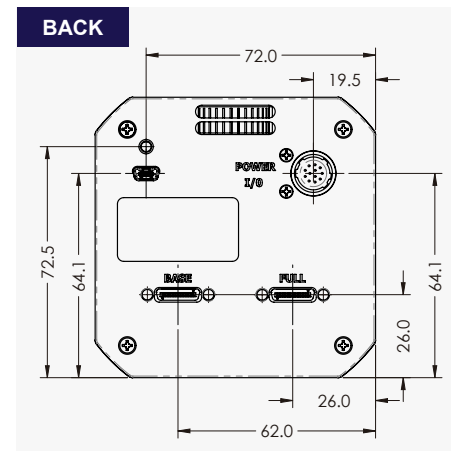
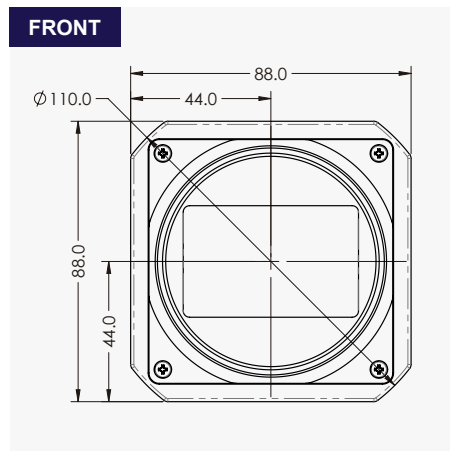


Monochrome with Microlens

KAI-47051



Dimensions

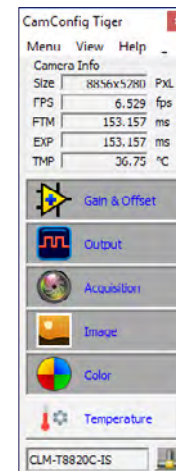


Ordering Information

Interface Available
Camera Link Medium (T8810)
Camera Link Full (T8820)
Sensor Types available
Monochrome
Bayer Color
Sparse

Lens Mounts
M72
Ordering
Ruggedized Industrial
Accessories (Sold separately)
PS12v04A-Power Supply w/ 1 input and 1 output

Camera Link GUI



Hirose Connectors

Power and I/O Interface
<ul style="list-style-type: none"> 1. 12V DC Return 2. +12V DC 3. Reserved 4. Reserved 5. OUT2 OPTO - 6. OUT1 TTL Gnd 7. OUT1 TTL Signal 8. IN1 OPTO + 9. IN2 TTL Signal 10. IN1 OPTO - 11. IN2 TTL Gnd 12. OUT2 OPTO +

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)



IMPERX 6421 Congress Ave., Boca Raton, FL 33487, USA
 Tel: +1-561-989-0006. Email: sales@imperx.com

WWW.IMPERX.COM

Technical data has been fully checked, but accuracy of printed matter is not guaranteed. Subject to change without notice. Copyright 2016.