

TIGER INTELLIGENT CAMERA SERIES

T3640 CCD 8.6 MP Camera Link®



Imperx: T3640

The Tiger T3640 CCD camera is an advanced, ruggedized, and economical digital camera providing 3600 x 2400 resolution and frame rates up to 15 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	3600 x 2400, 3624 x 2424 max		level, vertical smear			
Sensor	ON Semiconductor KAI-08670 color/mono/	Minimum Illuminations	1 Lux, F/ 1.4			
	Sparse CFA	Lens Mount	F-Mount (Default), M42, EOS Canon			
Sensor Format	CCD, 32.0mm	Supply Input Range	12VDC (6V - 30V), 1.5 A inrush			
Pixel Size	7.4 µm	Power Consumption	7.5 W (typ)			
Frame Rate	15 fps	Size (WxHxL)	69.5mm x 69.5mm x 51.5mm			
Dynamic Range	70 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: T3640 Applications

The T3640 incorporates a number of unique features tailored to reduce system complexity, maximize interface bandwidth, and expand the usable operational range.

Aerospace

Satellites

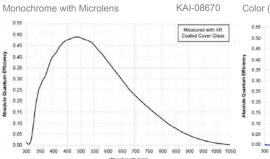
Surveillance

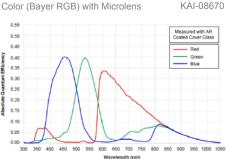
Military and Non-Military Ground Vehicles

Ball Grid Array

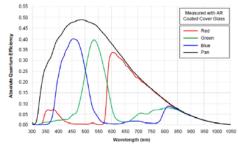
Printed Circuit Board Inspection Motion Analysis
 Broadcast Television
 Telepresence
 Unmanned Aerial Vehicles
 Machine Vision
 Reconnaissance Intelligent Traffic Systems • Aerial Imaging • Open Road Tolling Systems • Situational Awareness • Scientific • Particle Velocimetry

Absolute Quantum Efficiency

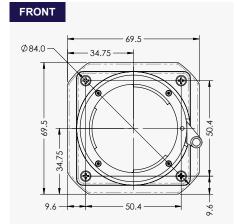


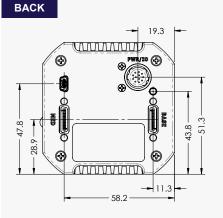


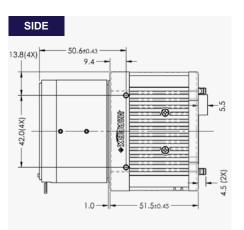




Dimensions







Camera Link GUI

CamCor	nfig Tiger			×		
Menu	View	H	elp	-		
Camer						
Size	3600x	2400	PxL			
FPS		12	fps			
FTM [270	.994	ms			
EXP		.994				
тмр 🛛		36.6	°C			
Gain & Offset						
Cutput						
Acquisition						
AEC/AGC						
Image						
Color						
CLM-3	640-RL0	00				



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

Quality Management System ISO 9001:2015 Registered

2.

3.

4.

5

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

12V DC Return

OUT2 OPTO -

6. OUT1 TTL Gnd

+12V DC

Reserved

Reserved

7. OUT1 TTL Signal

IN1 OPTO +

9. IN2 TTL Signal

10. IN1 OPTO -

11. IN2 TTL Gnd

12. OUT2 OPTO +

8.

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Ordering Information

Interface Available Camera Link Medium (CLM) CoaXPress (CXP)

Sensor Types available

Hirose Connectors Power and I/O Interface

600

BO

8 (D) (D)

8080

Monochrome Bayer Color Sparse CFA

Lens Mounts					
F-Mount (default)	EF Canon				
M42					
Ordering					
Ruggedized	Industrial				
Accessories (Sold separately)					
PS12v04A-Power Supply w/ 1 input and 1 output					

Link