

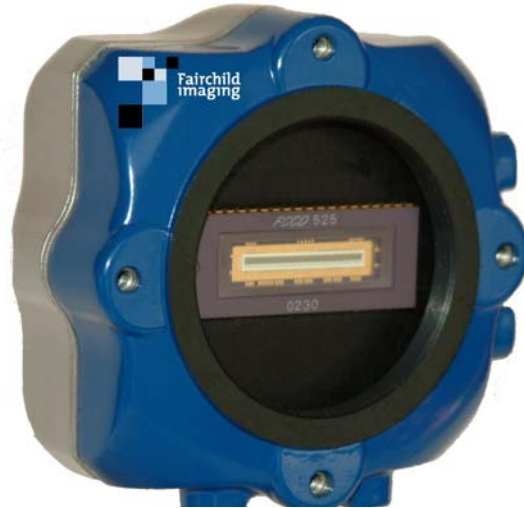


# OSPREY CAM/CCD-2KLV.TDI

## Description

The CAM/CCD-2KLV.TDI is an ultra-sensitive camera for use in line scan applications that demand high performance under low light conditions. The camera is based upon the CCD525 which is used in the very successful U.S. Postal Service Wide Field of View (WFOV) Camera. The camera has 2048 pixels in the cross-scan direction, with selectable gain stages up to 96 rows. The camera supports scan rates up to 46K lines per second. The CAM/CCD-

2KLV.TDI provides 4-port, 8-bit synchronous data. The camera includes sophisticated features such as anti-blooming, programmable gain and offset, and CDS gain. It is packaged in a very compact and rugged housing that contains a standard M58 x 0.75 base lens thread. Optional (Nikon-F) lens adapter is available.



## Features

### 2K x 96 TDI Sensor Architecture

- Uses time delay and integration architecture
- Electronically selectable TDI lengths of 96, 64, 48, 24

### Full Featured Camera Electronics

- LVDS I/O
- Requires only ONE power supply (+12 VDC)
- Low power dissipation (< 7 Watts)
- Programmable gain and offset

### Standard Interface

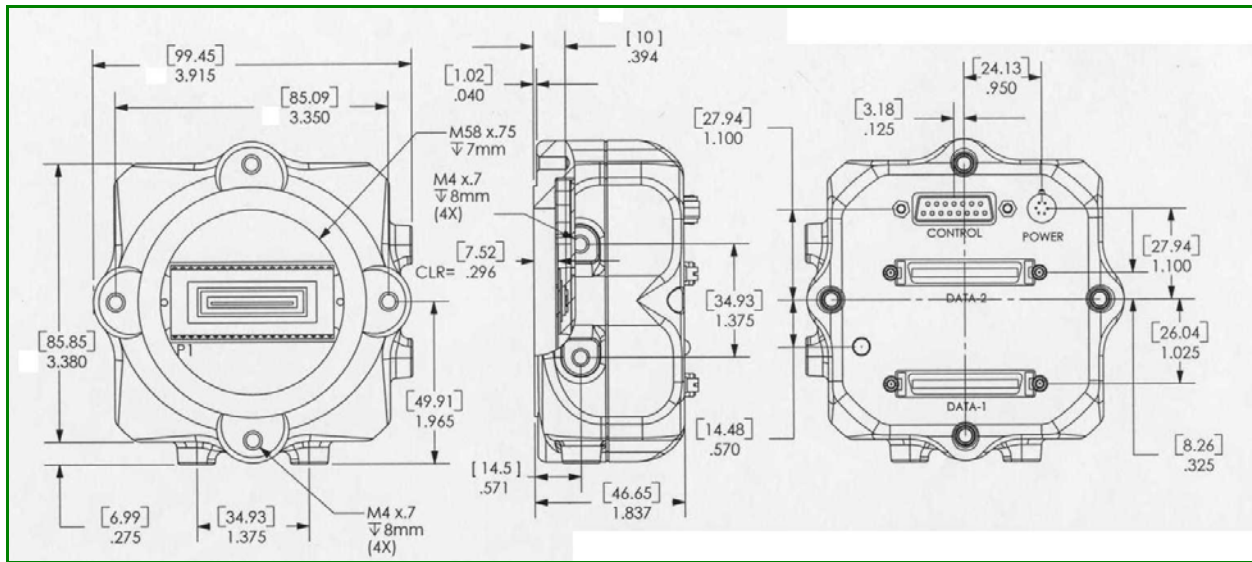
- Connects to National Instruments PCI-1424 Frame Grabber (or equivalent)
- Camera Data Cable Available (P/N 10524-6-02)
- Turnkey operation with Fairchild Imaging ICD Interface File

## Camera Performance Specifications

Housing Size:	3.92" H x 3.92" W x 1.84" D
Imaging Modes:	TDI 96, 64, 48, 24 (Framing optional)
Anti-Blooming:	> 1000x saturation
Pixel Pitch:	13µm x 13µm
CDS Processing:	Quad AD9840 AFEs
Output Ports:	4 (synchronous) LVDS
Data Rate:	100 Mpixels/sec (4 x 25MHz)
Line Rate:	Up to 46KHz
Gray Scale:	8-bit
Noise:	<1 LSB (rms)
Programmable:	VGA Gain, Offset, CDS Gain

## Sensor Performance Specifications

Sensor:	2048 x 96 pixels
Pixel Pitch:	13µm x 13µm
Anti-Blooming:	> 1000x saturation
Output Taps:	4 (synchronous)
CTE:	> 0.99992 horizontal > 0.99995 vertical
Saturation (v):	> 400 mV
PRNU:	< 10%



### **Interface Requirements**

#### **Power Supply**

- +12 VDC, 0.65 Amps

#### **External Synchronization**

- LVDS Input
  - Up to 46K Lines / Second

#### **Frame Grabber**

- National Instruments 1424 (or equivalent)

#### **Gain / Offset Programming**

- Fairchild Imaging supplied software interface
  - User's LPT1 Interface; only six wires required

### **WARRANTY**

Within twelve months of delivery to the end customer, Fairchild Imaging will repair or replace, at our option, any Fairchild Imaging product if any part is found to be defective in materials or workmanship. Contact Customer Service for assignment of warranty for any Fairchild Imaging product if any part is found to be defective in materials or workmanship.

### **CERTIFICATION**

Fairchild Imaging certifies that all products are carefully inspected and tested at the factory prior to shipment and will meet all requirements of the specifications under which it is furnished.

This product is designed, manufactured and distributed utilizing the ISO 9000:2000 Business Management System.

### **Fairchild Imaging**

1801 McCarthy Blvd., Milpitas CA 95035  
(800) 325-6975 or (408) 433-2500

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