



# OSPREY CAM/CCD-2KLV.TDI

## **High Performance Linescan Camera with TDI Sensor Architecture and Anti-Blooming.**

The Osprey™ is an ultra-sensitive camera for use in line scan applications that demand high performance in low light conditions. The camera is based upon the successful CCD525 sensor application in high speed postal OCR product. The camera has 2048 pixels resolution with electronically selectable gain stages up to 96 rows. It supports scan rates up to 46K lines per second. The Osprey™ provides 4-port, 8-bit synchronous LVDS data output. It includes sophisticated features such as anti-blooming, programmable gain, and offset. It also provides a framing mode for ease of setup. Framing mode is an excellent tool for mechanical and optical alignment of the camera to the target object. The camera is packaged in a compact and rugged industrial housing that contains a standard M58 x 0.75 base lens thread. Optional Nikon F-mount 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, 32 and 24 rows
- 1000X anti-blooming
- Framing mode that allows easy optical and mechanical alignment
- 46KHz line rate

#### **Full Featured Camera Electronics**

- LVDS interface
- Requires only ONE power supply (12 VDC)
- Low power dissipation (6 Watts)
- Programmable gain and offset

#### **Standard Interface**

- Connects to several popular frame grabbers
- Camera Data Cable available (P/N 10524-6-02)
- Turnkey operation with Fairchild Imaging ICD Interface File

### **Applications**

- Precision manufacturing inspection
- Web inspection
- Sorting and routing
- Biomedical readout systems
- Diagnostic systems

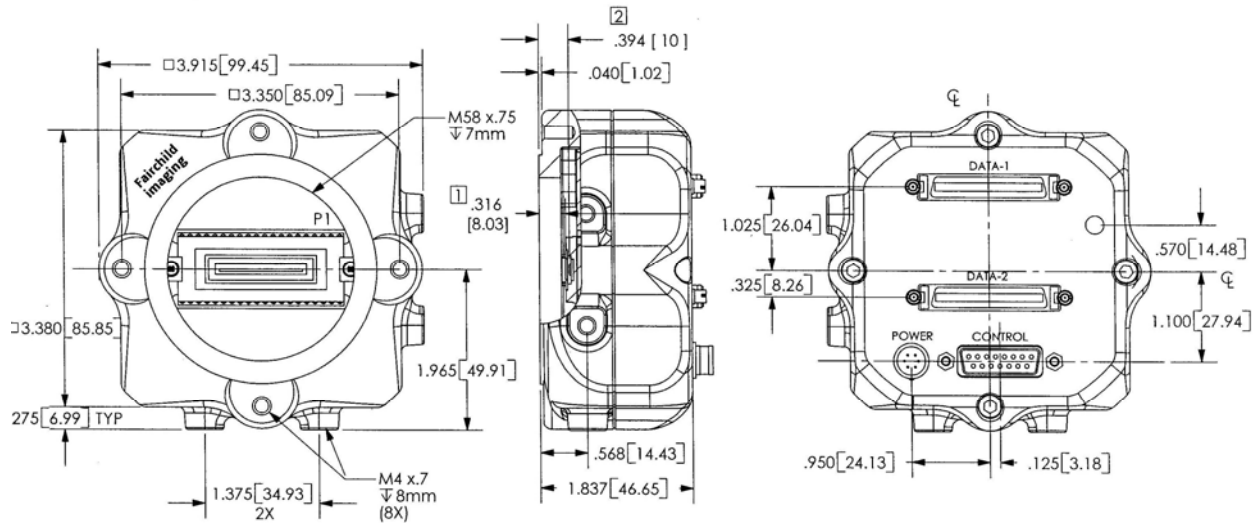
### **Camera Performance Specifications**

Resolution:	2048 pixels
Pixel Size:	13µm x 13µm
Housing Size:	3.92" H x 3.92" W x 1.84" D
Imaging Modes:	TDI 96, 64, 48, 32, 24 rows and framing mode
Anti-Blooming:	> 1000x saturation
Output Ports:	4 (synchronous) LVDS
Data Rate:	100 Mpixels/sec (4 x 25MHz)
Maximum Line Rate:	46KHz
Gray Scale:	8-bit
Noise:	<1 LSB (rms)
Programmable:	VGA Gain, Offset, CDS Gain
Lens Mount:	M58 x 0.75
Lens Mount Adapter:	M58 to F-mount adapter (optional)
Part Number:	CAM/CCD-2KLV.TDI
Operating Temperature:	45°C
Power Supply:	12VDC
Power Dissipation:	6W
Regulatory Compliance:	CE, FCC

### **Sensor**

The Osprey camera uses Fairchild Imaging CCD525 sensor. Please contact Fairchild Imaging for sensor details.

## Mechanical Dimensions



## Interface Requirements

### Frame Grabber

- National Instruments PCI-1424
- Coreco PC-DIG LVDS
- Matrox Meteor – II, LVDS
- Visit [www.fairchildimaging.com](http://www.fairchildimaging.com) for a list of additional frame grabbers

### Gain / Offset Programming

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

## Responsivity Curve

Please contact Fairchild Imaging for responsivity curve.

## 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 9001:2008 Business Management System.

### Fairchild Imaging

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