Falcon 1.4M100 XDR

Area Scan Cameras

Key Features

- 1.4 megapixels, 100 fps
- High dynamic range
- Global shutter and reset
- Exposure control
- Concurrent integration and readout
- Faster frame rates through vertical windowing
- Power over Camera Link
- Mini-Camera Link
- 10 meter transmission @ 80 MHz

Programmability

- Flat field correction
- Adjustable timing modes
- Adjustable gain and offset
- Test patterns and camera diagnostics

Typical Applications

- Electronics manufacturing
- Semiconductor inspection
- Print inspection–registration control
- Flat panel display inspection
- Medical imaging
- 2D/3D laser profiling
- General machine vision

Overview

Fast, sharp, and with megapixel imaging. 100 frames per second and 1.4 megapixels of resolution delivered within a compact camera body.

Our latest 1.4 megapixel camera delivers 100 fps at full resolution in a compact body ideal for applications in electronics manufacturing and semiconductor inspection. The camera uses Teledyne DALSA's patented CMOS sensor technology to deliver global shuttering, global reset, and concurrent integration and readout. The images produced are crisp and clear, avoiding image artifacts associated with rolling shutter cameras.

Fully programmable, via base mini-Camera Link, the camera incorporates exposure control, gain and offset adjustment, and flat-field correction. Ease of use is enhanced through simple camera control and timing, and power over Camera Link (PoCL) eliminates the need for a separate power cable and simplifies cable and system integration. Delivered in a robust, compact body, this camera should be your definitive choice for area-based systems.

The XDR model of the Falcon camera maximizes the available dynamic range. This results in a camera that best discerns subtle differences in images, allowing for greater defect detection than ever before.

Specifications

Resolution	1400 pixels (H) x 1024 pixels (V)
Data Rate	2 x 80 MHz
Max. Line/Frame Rate	100 fps
Pixel Size	7.4 μm x 7.4 μm
Data Format	8 bit or 10 bit selectable
Output	Base mini-Camera Link
Lens Mount	C-mount
Responsivity	12 DN/(nJ/cm^2)
Dynamic Range	57 dB
Nominal Gain Range	4x digital
Size	44 mm x 44 mm x 44 mm
Mass	< 175 g
Operating Temp	0 °C to 50 °C
Power Supply	12 V to 15 V DC
Power Dissipation	< 3 W
Regulatory Compliance	CE and RoHS
Control	SDR26 mini-Camera Link
Data	Shared with Control
Power	Hirose 6 pin circular, or PoCL (shared with control)
Example Part Number	FA-20-01M1H

PoCL®

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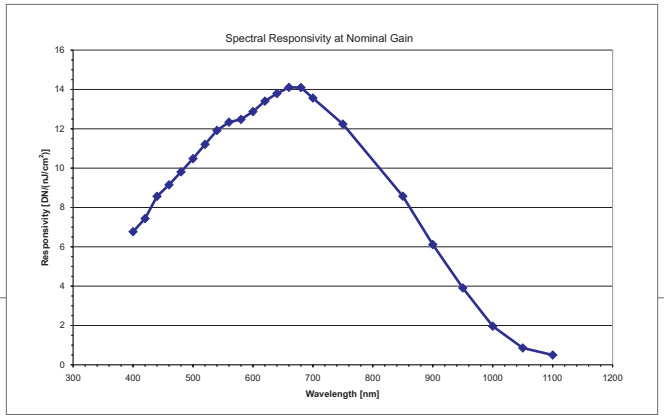
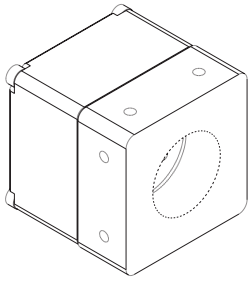
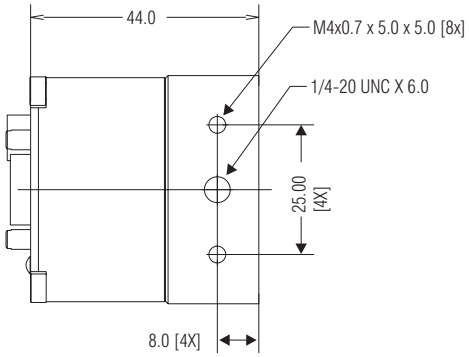
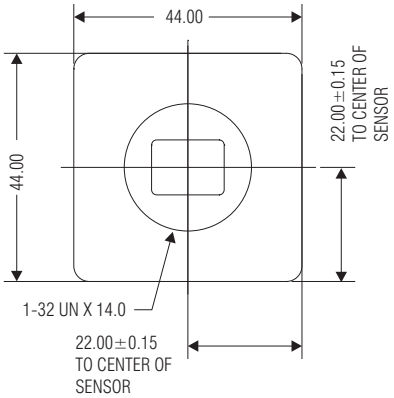
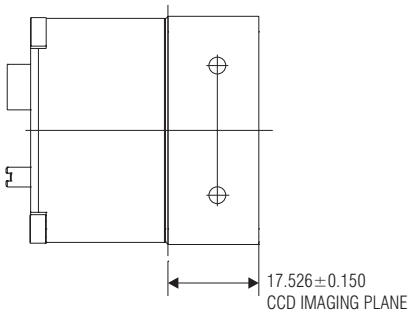
With its high resolution and speed you can inspect more products, in more detail, in a shorter amount of time.

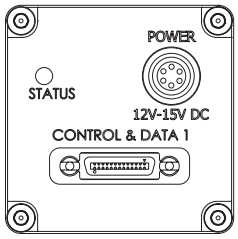












Units: mm.

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Teledyne DALSA is an international leader in digital imaging and semiconductors and has its corporate offices in Waterloo, Ontario, Canada.

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