Overview

Global shutter technology, 62 fps, and 4 megapixels of resolution.

Key Features

- 4 megapixels
- 62 fps
- Global electronic shutter with exposure control
- Flat field correction (FFC)
- 1000x antiblooming
- Faster frame rates through vertical windowing
- High speed 10m data transmission
- Snapshot modes

Programmability

- Adjustable integration time and frame rate
- Analog offset control
- Adjustable digital gain
- 8 or 10 bit selectable output
- Test pattern and camera diagnostics

Typical Applications

- Electronics manufacturing – AOI, pick and place, and solder paste inspection
- Semiconductor wafer inspection
- Intelligent traffic systems
- Flat panel display inspection
- General machine vision

Perfect for electronics manufacturing and semiconductor inspection, the Falcon 4M60 cameras use DALSA's patented CMOS sensor technology capable of global shuttering and 62 fps at full 4 megapixel resolution.

The 4M60 uses a global shutter to eliminate the imaging issues often associated with full frame, frame transfer, or rolling shutter cameras, such as smearing or time displacement artifacts.

Fully programmable with a Base or Medium Camera Link interface, the cameras incorporate exposure control, gain and offset adjustment and 1000x antiblooming. Additionally, the camera's powerful flat field correction (FFC) creates individual gain and offset coefficients for each pixel, eliminating FPN, PRNU, and other non-uniformities.

With features like these, this camera should be your definitive choice for area based systems.
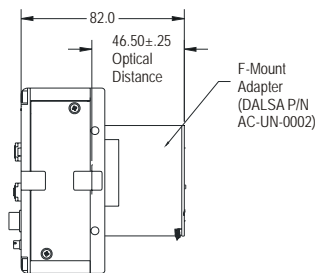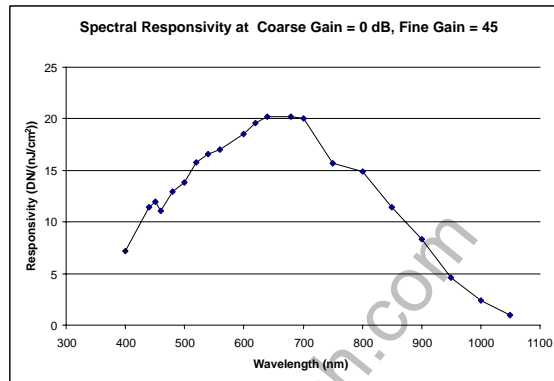
Specifications

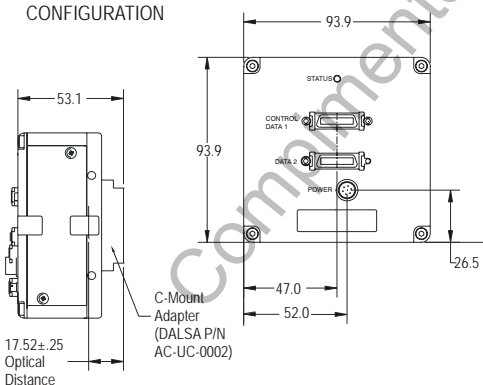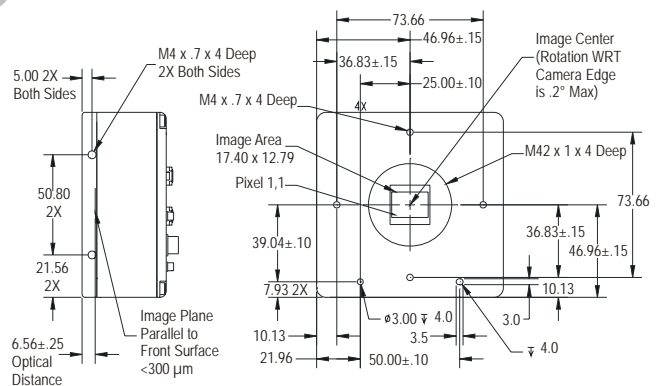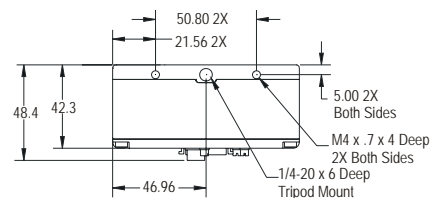|	
Resolution	2352 x 1728
Data Rate	4 x 80 MHz
Max. Line/Frame Rate	62 fps
Pixel Size	7.4 μm
Data Format	8, 10 bit
Output	Base, Medium Camera Link
Lens Mount	M42 x 1, F
Responsivity	14 DN/(nJ.cm²) @ 1x gain
Dynamic Range	56 dB
Nominal Gain Range	Up to 4x
Size	94 x 94 x 50 mm
Mass	<550 g
Operating Temp	0°C to 50°C
Power Supply	+12 V to +15 V
Power Dissipation	<10 W
Regulatory Compliance	CE
Control	MDR26 Camera Link
Data	Shared with Control
Power	Hirose 6 pin
Example Part Number	PT-41-04M60-00-R

Falcon 4M60
Area Scan Cameras

At 62fps, the 4 megapixel 4M60 camera delivers 4 times more speed than comparable ILT cameras. Using Camera Link and the same optical format as our 4M15, retrofitting the new 4M60 into existing 4 megapixel systems is simple.

Spectral Responsivity at Coarse Gain = 0 dB, Fine Gain = 45

CE

Pb

F-MOUNT CONFIGURATION

82.0

46.50±.25 Optical Distance

F-Mount Adapter (DALSA P/N AC-UN-0002)

C-MOUNT CONFIGURATION

53.1

17.52±.25 Optical Distance

C-Mount Adapter (DALSA P/N AC-UC-0002)

93.9

93.9

47.0

52.0

26.5

STATUS

CONTROL DATA 1

DATA 2

POWER

5.00 2X Both Sides

50.80 2X

21.56 2X

6.56±.25 Optical Distance

M4 x .7 x 4 Deep 2X Both Sides

Image Plane Parallel to Front Surface <300 µm

50.80 2X

21.56 2X

50.80 2X

5.00 2X Both Sides

M4 x .7 x 4 Deep 2X Both Sides

1/4-20 x 6 Deep Tripod Mount

48.4

42.3

46.96

73.66

46.96±.15

36.83±.15

25.00±.10

4X

Image Area 17.40 x 12.79

Pixel 1,1

39.04±.10

7.93 2X

10.13

21.96

Image Center (Rotation WRT Camera Edge is .2° Max)

M4 x .7 x 4 Deep

M42 x 1 x 4 Deep

73.66

36.83±.15

46.96±.15

10.13

ø3.00 ⊽ 4.0

3.5

3.0

⊽ 4.0

50.00±.10

Tolerance Unless Otherwise Specified:
.X±.5
.XX±.30

DALSA