

# Falcon 4M60/4M30 Stop Action (Preliminary)

## Area Scan Cameras



### Key Features

- Two cameras: 4M60 and 4M30
- 4 megapixels
- 62 fps and 31 fps
- Global electronic shutter with exposure control
- Flat field correction (FFC)
- 1000x antiblooming
- Faster frame rates through vertical windowing

### 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

### Overview

Stop Action technology, 62 fps and 4 megapixels of resolution.

Perfect for electronics manufacturing and semiconductor inspection, the Falcon 4M60 and 4M30 cameras use DALSA's patented CMOS sensor technology capable of 62 fps at full 4 megapixel resolution.

The 4M60 and 4M30 use 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

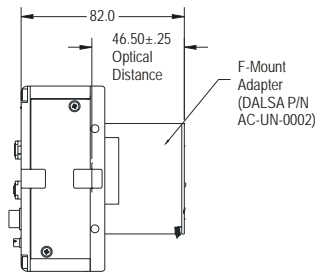
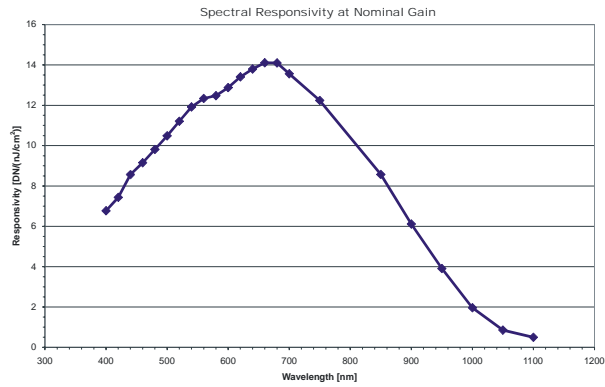
Resolution	2352 (H) x 1728 (V)
Data Rate	4 x 80 MHz (4M60) / 2 x 80 MHz (4M30)
Max. Line/Frame Rate	62 fps
Pixel Size	7.4 $\mu\text{m}$
Data Format	8, 10 bit
Output	Base, Medium Camera Link
Lens Mount	M42 x 1
Responsivity	12 DN/(nJ/cm <sup>2</sup> ) @ 1x gain
Dynamic Range	56 dB
Nominal Gain Range	Up to 16x
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



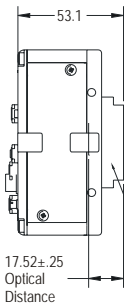
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## Area Scan Cameras

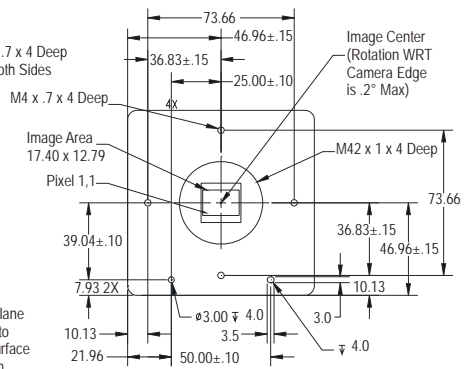
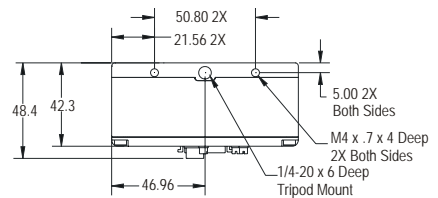
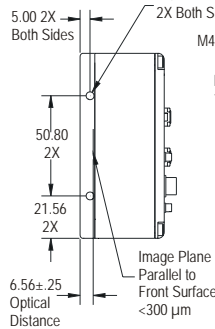
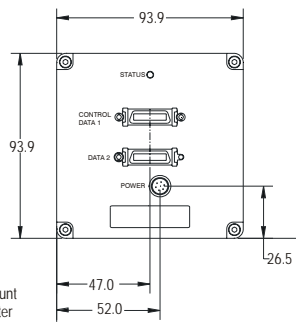
At 62fps, the 4 megapixel 4M60 camera delivers 4 times more speed than comparable ILT cameras. Using Camera Link and the same optical format as our 4M15, retrofitting the new 4M60 into existing 4 megapixel systems is simple.



F-MOUNT CONFIGURATION



C-MOUNT CONFIGURATION



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

