

Key Features

- Global shutter and exposure control
- Faster frame rates through windowing
- Good NIR response
- Built-in FPN and PRNU correction
- CLHS and GenlCam compliant

Programmability

- Adjustable analog / digital gain and offset
- 12 and 16 bit selectable output
- Adjustable integration time and
- frame rate
- Test patterns and camera diagnostics

Typical Applications

- · Aerial imaging
- · Aerial reconnaissance
- Surveillance
- Machine vision

Ultra High Resolution and High Speed CMOS Cameras

86 Megapixels at 16 fps with Global Shutter

Teledyne DALSA's new generation of color and monochrome area scan cameras—the Falcon4™ 86M—incorporate very large resolutions and faster frame rates, enabling high speed image capture with superb spatial resolution and improved image quality. The Falcon4 camera is the best choice for applications where throughput, resolution and high pixel capacity matter most.

Inside the Falcon4 camera is our leading-edge CMOS sensor, which enables high speeds at very large resolutions. This new production of CMOS sensors builds upon the performance levels of the earlier generations of Falcon cameras and improves on image quality attributes.

The Falcon4 cameras are compliant with GenlCam[™] and CameraLink HS[™] (CLHS) specifications—delivering 12 and 16 bits of data. The M95 thread opening allows for your choice of lens to use.

Specifications

 $\begin{array}{lll} \mbox{Resolution} & 10720 \ \mbox{(H)} \ \mbox{x 8064 (V)} \\ \mbox{Pixel Rate} & 1.38 \ \mbox{Gpixel / s} \\ \mbox{Frame Rate} & 16 \ \mbox{fps, maximum} \\ \mbox{Pixel Size} & 6 \ \mu \mbox{m} \ \mbox{x 6} \ \mu \mbox{m} \\ \mbox{Bit Depth} & 12 \ \mbox{bits and 16 bits} \\ \end{array}$

Lens Mount M95 x 1

Dynamic Range 56 dB (monochrome) and 50 dB (color) with global shutter

62 dB (monochrome) and 54 dB (color) with rolling shutter

Exposure Time $100 \mu s$ minimum

Size 100 mm (H) x 100 mm (W) x 70.5 mm (D)

Mass < 1 Kg

Operating Temp 0 °C to +50 °C, front plate temperature
Power +12 V to +24 V DC, Hirose 12-pin circular

Power Dissipation < 35 W

Data Interface CLHS—single C2 7M1, CX4 connector

Regulatory Compliance CE and RoHS

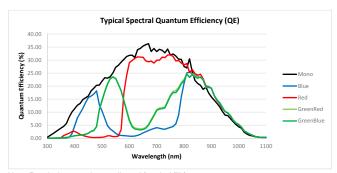
Camera Part Number FA-S0-86M16 (monochrome), FA-S1-86M16 (color)

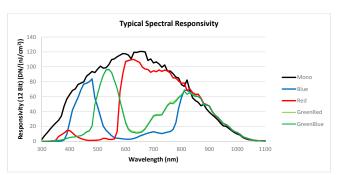




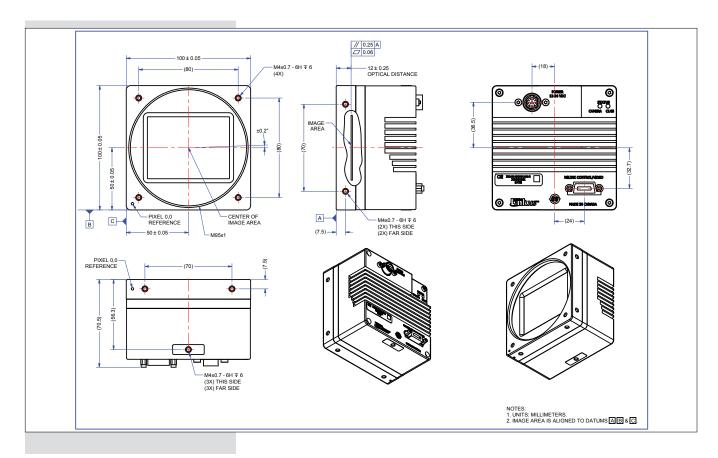
Falcon4 86M

Color and Monochrome CMOS Area Scan Cameras





Note: Results have not been adjusted for pixel fill factor.



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