

# Falcon4 86M

Color and Monochrome CMOS Area Scan Cameras



## 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 GenICam™ and CameraLink HS™ (CLHS) specifications—delivering 12 and 16 bits of data. The M95 thread opening allows for your choice of lens to use.

#### Key Features

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

#### Specifications

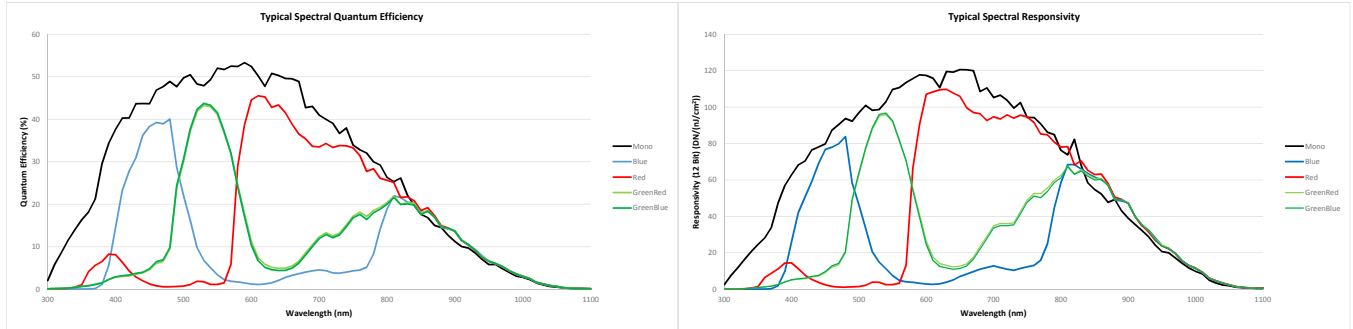
Resolution	10720 (H) x 8064 (V)
Pixel Rate	1.38 Gpixel / s
Frame Rate	16 fps, maximum
Pixel Size	6 $\mu\text{m}$ x 6 $\mu\text{m}$
Bit Depth	12 bits and 16 bits
Lens Mount	M95 x 1
Dynamic Range	56 dB (monochrome) and 50 dB (color) with global shutter 62 dB (monochrome) and 54 dB (color) with rolling shutter
Exposure Time	100 $\mu\text{s}$ 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)



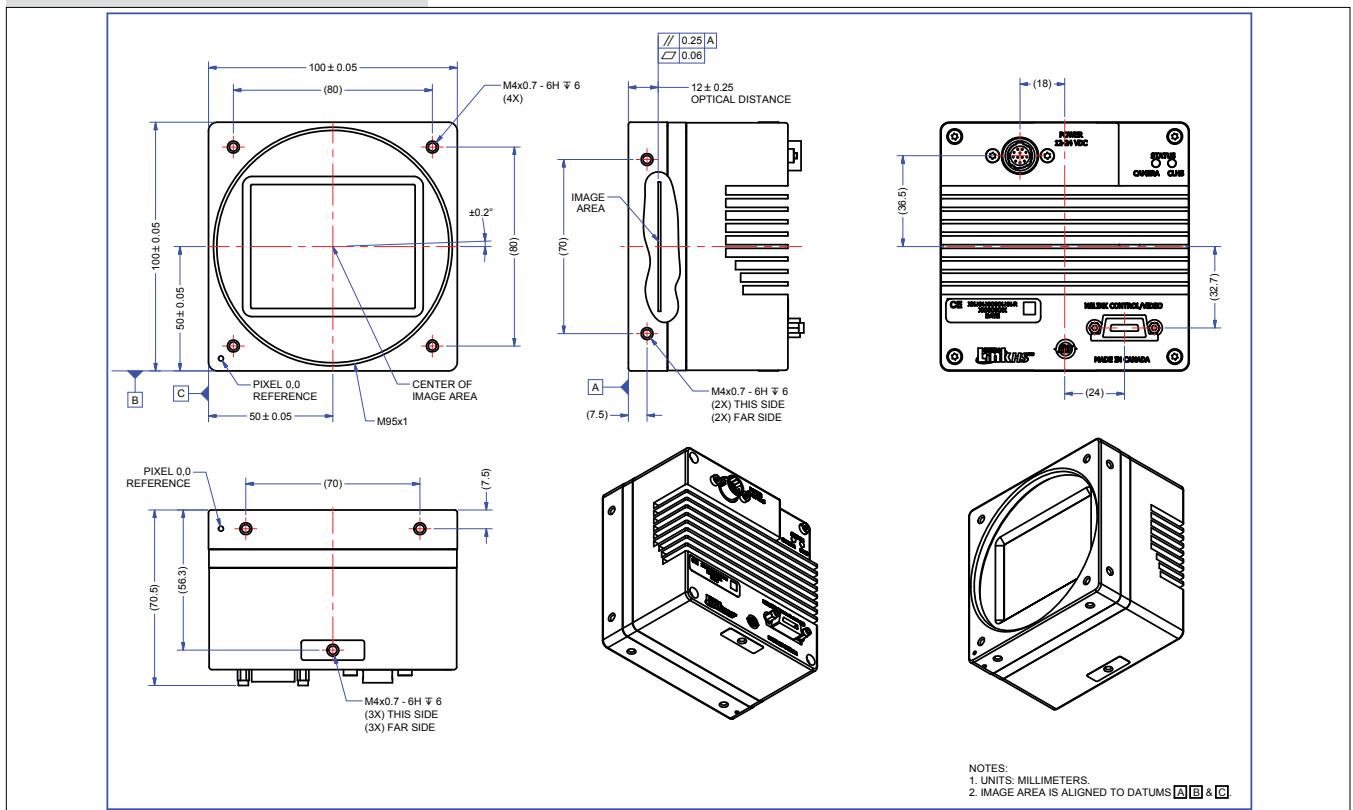
Part of the Teledyne Imaging Group

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



[www.teledynedalsa.com](http://www.teledynedalsa.com)

**Americas**  
 Boston, USA  
 +1 978-670-2000  
[sales.americas@teledynedalsa.com](mailto:sales.americas@teledynedalsa.com)

**Europe**  
 Krailling, Germany  
 +49 89-89-54-57-3-80  
[sales.europe@teledynedalsa.com](mailto:sales.europe@teledynedalsa.com)

**Asia Pacific**  
 Tokyo, Japan  
 +81 3-5960-6353  
[sales.asia@teledynedalsa.com](mailto:sales.asia@teledynedalsa.com)

Shanghai, China  
 +86 21-3368-0027  
[sales.asia@teledynedalsa.com](mailto:sales.asia@teledynedalsa.com)