

# FALCON™ 4 CLHS CAMERAS

## KEY FEATURES

- Reduced dark noise levels and improved dark offset
- Improved sensitivity, including NIR response
- In-camera image pre-processing (lens shading correction, pixel correction)
- Large full well when using in-sensor binning >142Ke
- Thousands of frames per second in Partial Scan Mode (ROI)
- Multi-ROI support (up to 32 ROI) and Cycling Mode
- Advanced Sequencer functions of different features

## PROGRAMMABILITY

- Customizable user settings
- Programmable exposure time
- Adjustable analog / digital gain and offset
- Adjustable integration time and frame rate
- Test patterns and camera diagnostics

## RELIABILITY

- Robust all-metal body
- 3 year warranty

## TYPICAL APPLICATIONS

- Electronic Inspection
- Aerial Imaging
- Flat Panel Inspection
- Semiconductor
- High Speed 3D imaging
- Surveillance
- Motion Tracking and Analysis

## REGULATORY COMPLIANCE

- CE and RoHS compliant

## True High-Performance: High-Speed Global Shutter CMOS Cameras

When you need true high-performance imaging, turn to the Falcon™ 4-CLHS camera series. Using Teledyne Imaging's advanced CMOS architectures, the Falcon4-CLHS cameras offer unique, unprecedented capabilities for large area, high resolution, high speed imaging. Models include high-speed cameras with frame rates up to 1200 fps and high-resolution cameras with up to 67 MP.



**SMARTER IMAGING FOR BETTER LIVES**

Perth: (08) 9242 5411 Melbourne: (03) 9384 1775 Sydney: (02) 9905 1551

Email: [sales@adeptturnkey.com.au](mailto:sales@adeptturnkey.com.au)  
Web site: [www.adept.net.au](http://www.adept.net.au)

### FALCON4-CLHS INDIVIDUAL MODEL SPECIFICATIONS

	Active Resolution	Sensor Model	Frame Rate	Pixel Size	Dynamic Range	Max. Image Circle	Data Format	Model Part Numbers
Falcon4-CLHS M2240	2240 x 1248	Teledyne e2v Lince 2.8 MP	1200 fps	12.0 µm	63 db	APS-C	8- 10-bit Mono	FA-HM10-M2245
Falcon4-CLHS M4400	4480 x 2496	Teledyne e2v Lince 11 MP	330 fps	6.0 µm	60.8 dB	APS-C	8 or 10-bit Mono	FA-HM11-M4405
Falcon4-CLHS M4480	4480 x 2496	Teledyne e2v Lince 11 MP	600 fps	6.0 µm	60.8 dB	APS-C	8 or 10-bit Mono	FA-HM10-M4485
Falcon4-CLHS M6200	6144 x 6144	Teledyne e2v Emerald 37M	120 fps	2.5 µm	58.2 dB	1.4"	8 or 10-bit Mono	FA-HM10-M6205
Falcon4-CLHS M8200	8192 x 8192	Teledyne e2v Emerald 67M	90 fps	2.5 µm	58.2 dB	APS-C	8 or 10-bit Mono	FA-HM10-M8205

### FALCON4-CLHS FAMILY SPECIFICATIONS (COMMON TO ALL MODELS)

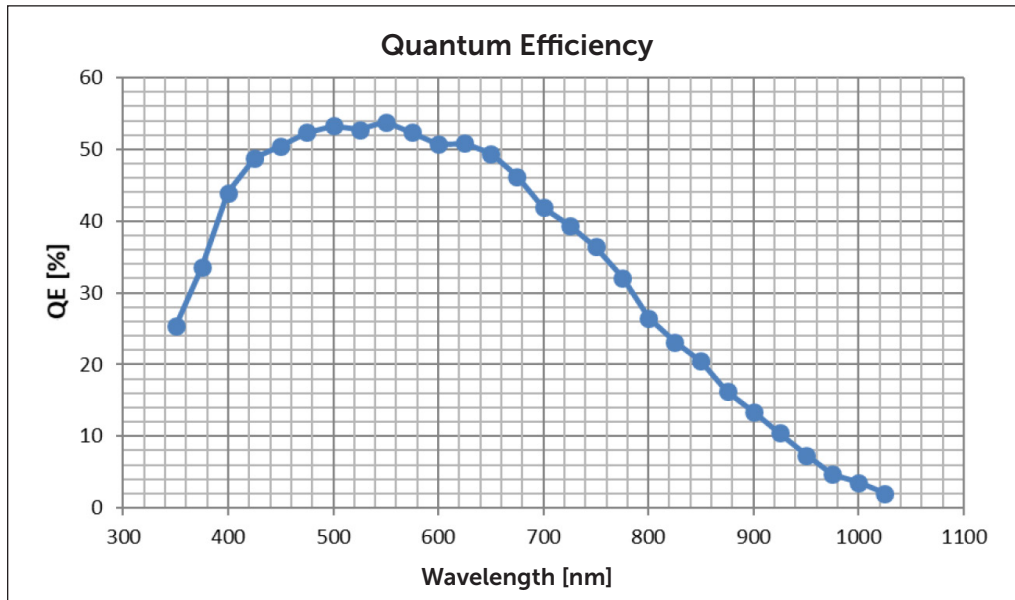
Feature	Falcon4 Medium Case p / n: FA-Hx1x-xxxx5
Data Output Transfer	CLHS 4 or 7-Lanes - 10.3 Gb / sec. per Lane
Exposure Control	INTERNAL: Programmable via the camera API, EXTERNAL: Based on Trigger Width
I/O Ports	2 input / 4 Output, Opto-coupled
Lens Mount	M42 x 1 mm
Size (L x H x W)	59 mm x 59 mm x 70 mm
Mass	< 321 g
Operating Temp	-20 to +50°C (Housing Temperature)
Power Supply	10 V to 30 V DC
Power Dissipation (model dependent)	< 13 W
Data Connector	CLHS CX4
Power and I/O Connector	SAMTEC TFM-105 type
Camera Specification	Camera Link HS X-protocol
Software Platform	Teledyne Sopera LT 8.6 or newer (Windows or Linux)

## RESPONSIVITY GRAPHS

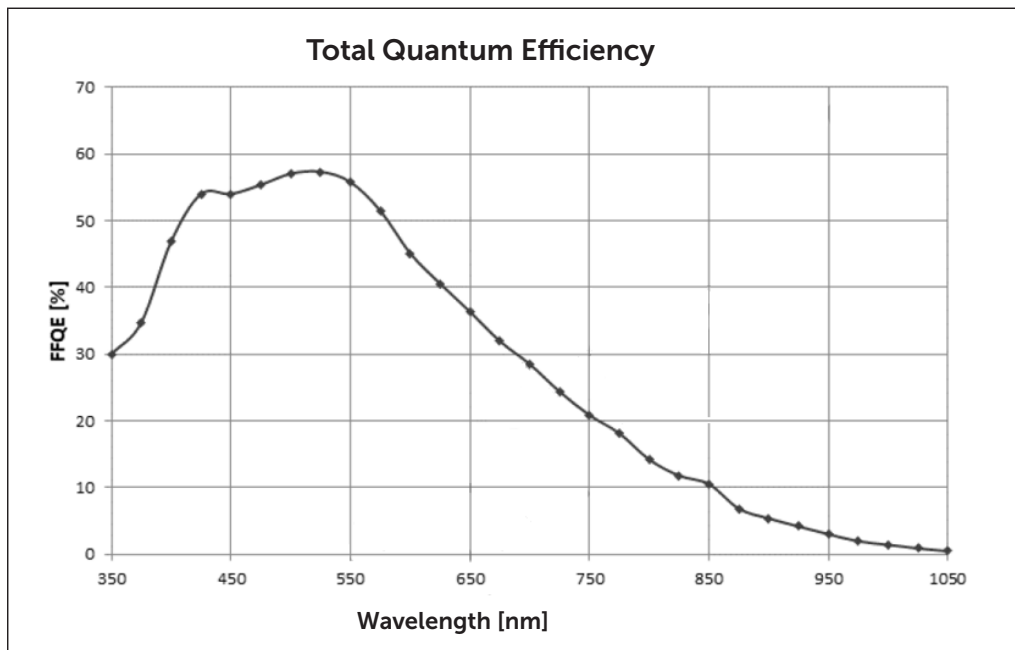
### Spectral Sensitivity Characteristics

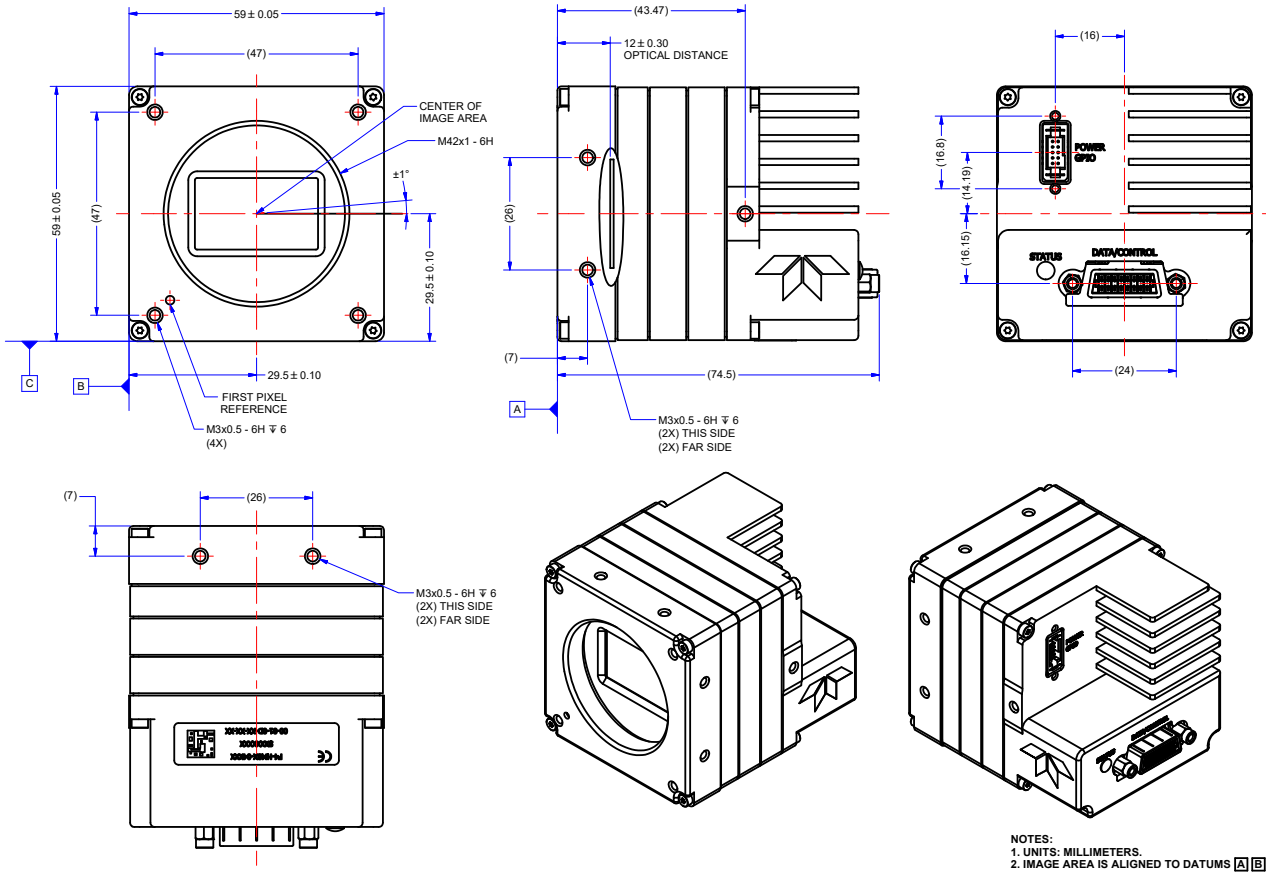
Excludes lens characteristics and light source characteristics

#### FALCON4-CLHS M4480 / M4400 / M2240



#### FALCON4-CLHS M8200 / M6200



**SPECIFICATIONS: Falcon4-CLHS FA-Hxxx-xxxx5 Medium Case**

**FOR MORE INFORMATION CONTACT:**

AMERICAS Boston, USA | +1 978-670-2000 | [TDI\\_sales.americas@teledynedalsa.com](mailto:TDI_sales.americas@teledynedalsa.com)  
 EUROPE Krailling, Germany | +49 89-89-54-57-3-80 | [TDI\\_sales.europe@teledynedalsa.com](mailto:TDI_sales.europe@teledynedalsa.com)  
 ASIA PACIFIC Tokyo, Japan | +81 3-5960-6353 | [TDI\\_sales.asia@teledynedalsa.com](mailto:TDI_sales.asia@teledynedalsa.com)  
 Shanghai, China | +86 21-3368-0027 | [TDI\\_sales.asia@teledynedalsa.com](mailto:TDI_sales.asia@teledynedalsa.com)

This document does not contain information whose export/transfer/disclosure is restricted by the Canadian Export Control regulation. Teledyne DALSA has its corporate offices in Waterloo, Canada. Teledyne DALSA reserves the right to make changes at any time without notice. © 2023 Teledyne DALSA.

Revision Number:  
 Revision Date: 2023 04 26