FLIR CHAMELEON®3

P/N: CM3-U3-50S5, USB3 VISION

FLEXIBLE FORM FACTOR + USB3 VISION

The Chameleon3 camera line combines the ease-of-use of USB 3.0, the small size and flexibility of board-level, and the most popular CCD and CMOS image sensors into an affordable package. Available in a compact 44 x 35 x 19.5 mm case or as a 40 x 31 mm board stack. The lightweight metal case is designed for reliability and offers multiple mounting points and a locking USB 3.0 connection. Includes on-camera frame buffer for image retransmission, opto-isolated GPIO with locking connection, and a hassle-free 3-year warranty.
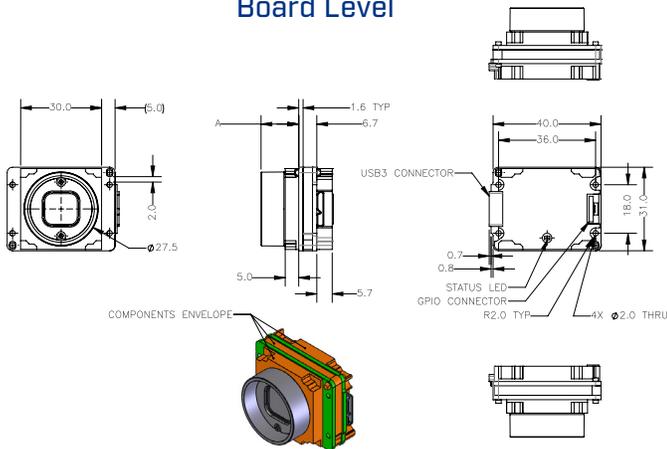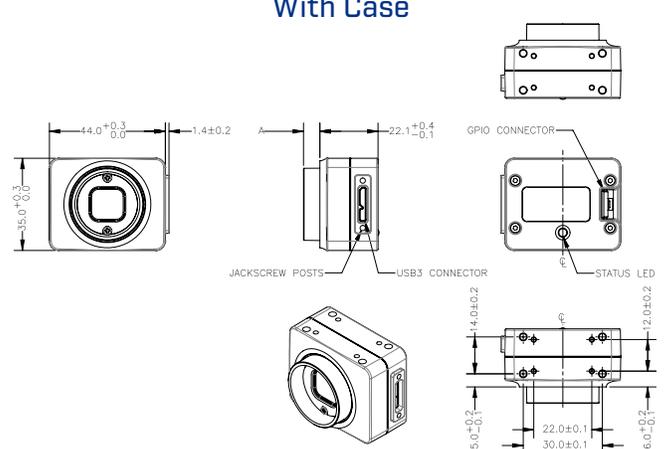
KEY FEATURES

- Boxed and board level available
- On-camera image processing: color interpolation, gamma, and LUT
- 16 MByte frame buffer; LED status indicator
- Sony® Pregius Global Shutter CMOS sensor

Board Level

With Case

FLIR® | The World's Sixth Sense®

Specifications

	CM3-U3-50S5M	CM3-U3-50S5C
Firmware	1.12.3.0	1.12.3.0
Resolution	2448 x 2048	2448 x 2048
Frame Rate	35 FPS	35 FPS
Megapixels	5.0 MP	5.0 MP
Chroma	Mono	Color
Sensor	Sony IMX264, CMOS, 2/3"	Sony IMX264, CMOS, 2/3"
Readout Method	Global shutter	Global shutter
Pixel Size	3.45 µm	3.45 µm
Lens Mount	CS-mount	CS-mount
ADC	12-bit	12-bit
Gain Range	0 dB to 47.994 dB	0 dB to 47.994 dB
Exposure Range	0.013 ms to 31.995 seconds	0.013 ms to 31.995 seconds
Trigger Modes	Standard, bulb, overlapped, multi-shot	Standard, bulb, overlapped, multi-shot
Partial Image Modes	Pixel binning, ROI	Pixel binning, ROI
Image Processing	Gamma, lookup table, and sharpness	Gamma, lookup table, hue, saturation, and sharpness
HDR Sequencing	4 x exposure, 4 x gain	4 x exposure, 4 x gain
Image Buffer	16 MB	16 MB
User Sets	2 memory channels for custom camera settings	2 memory channels for custom camera settings
Flash Memory	1 MB non-volatile memory	1 MB non-volatile memory
Opto-isolated I/O Ports	1 input, 1 output	1 input, 1 output
Non-isolated I/O	2 bi-directional	2 bi-directional
Serial Port	1 (over non-isolated I/O)	1 (over non-isolated I/O)
Auxiliary Output	3.3 V, 150 mA maximum	3.3 V, 150 mA maximum
Interface	USB 3.1	USB 3.1
Power Requirements	5-24 V via GPIO or 5 V via USB 3.1 interface	5-24 V via GPIO or 5 V via USB 3.1 interface
Power Consumption	<3 W maximum	<3 W maximum
Dimensions/Mass	44 mm x 35 mm x 19.5 mm (case enclosed); 40 mm x 31 mm (board level) /54.9 g (cased) / 27.9 g (board level)	44 mm x 35 mm x 19.5 mm (case enclosed); 40 mm x 31 mm (board level) /54.9 g (cased) / 27.9 g (board level)
Machine Vision Standard	USB3 Vision v1.0	USB3 Vision v1.0
Compliance	CE, FCC, KCC, RoHS. The ECCN for this product is: EAR099.	CE, FCC, KCC, RoHS. The ECCN for this product is: EAR099.
Temperature	Operating: 0° to 45°C Storage: -30° to 60°C	Operating: 0° to 45°C Storage: -30° to 60°C
Humidity	Operating: 20% to 80% (no condensation) Storage: 20% to 95% (no condensation)	Operating: 20% to 80% (no condensation) Storage: 20% to 95% (no condensation)
Warranty	3 years	3 years

FLIR Integrated Imaging Solutions

CANADA
12051 Riverside Way
Richmond, BC, Canada
V6W 1K7
T: +1 866.765.0827 (toll free)
T: +1 604.242.9937
F: +1 604.242.9938
E: mv-sales@flir.com
www.flir.com/mv

USA
T: +1 866.765.0827 (toll free)
E: mv-na-sales@flir.com

EUROPE
T: +49 7141 488817-0
F: +49 7141 488817-99
E: mv-eusales@flir.com

CHINA
T: +86 10 8215 9938
F: +86 10 8215 9936
E: mv-chinasales@flir.com

ASIA
E: mv-asiasales@flir.com

For a full list of international distributors and offices visit www.flir.com/contact-us

www.flir.com/mv

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