

Lt Series Board Level Cameras

Compact, Lightweight USB3 Cameras Designed for Embedded Systems

Compact and light-weight USB 3 cameras that provided both monochrome and vivid color images for the most demanding environments.

Perfect for embedded systems, Teledyne Lumenera's Lt Series Board Level Cameras offer a smaller, lighter, and lower cost imaging solution. Equipped with the latest advanced Starvis™ and Pregius™ CMOS sensors from Sony®, with a resolution of 2 – 20 megapixels. With connectors on the side of each camera, applications can take advantage of a shorter cable lengths and a flat back design that minimizes the space required for vision systems.



Key Features

Wide selection of advanced Sony Global and Rolling CMOS sensors to meet the diverse requirements of today's embedded vision systems.

Size

Compact board level foot print is ideal for applications where space is tight: UAVs, handheld devices, mobile devices.




















Applications

Ready to meet the challenges of embedded system applications such as aerial imaging, intelligent traffic systems (ITS), robotic inspection, and life sciences.

Compatibility

Flexible, proven 32 and 64-bit operating system compatibility for, Windows, Linux, Linux for embedded system platforms, and single board computers (SBCs).

Lt SERIES BOARD LEVEL CAMERAS SPECIFICATIONS

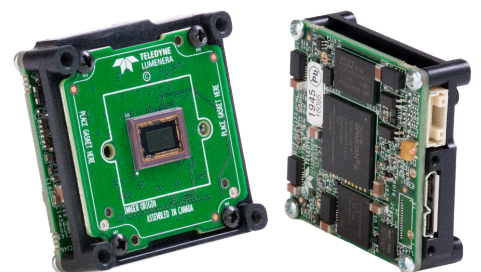
| | Active Resolution | Sensor Model | Frame Rate | Pixel Size | Dynamic Range | Max. Image Circle | Data Format | Part Number** |
|---------------------------------------------------------------------------------------------|-------------------|------------------------|------------|------------|---------------|-----------------------|-------------|-----------------|
|  Lt-C1610B | 1608 x 1104 | Sony IMX432 (1.7M) | 96 fps | 9.00 µm | 72.1 dB | 1.1" Optical Format | 8 or 12-bit | LT-UC11-C161NBL |
|  Lt-M1610B | 1608 x 1104 | Sony IMX432 (1.7M) | 96 fps | 9.00 µm | 72.1 dB | 1.1" Optical Format | 8 or 12-bit | LT-UM11-M161NBL |
|  Lt-C1630B | 1632 x 1248 | Sony IMX430 (2.0M) | 86 fps | 4.50 µm | 73 dB | 1/1.7" Optical Format | 8 or 12-bit | LT-UC11-C163NBL |
|  Lt-M1630B | 1632 x 1248 | Sony IMX430 (2.0M) | 86 fps | 4.50 µm | 73 dB | 1/1.7" Optical Format | 8 or 12-bit | LT-UM11-M163NBL |
|  Lt-C1900B | 1944 x 1096 | Sony IMX327 (2.1M) RS* | 60 fps | 2.90 µm | 72.8 dB | 1/2.8" Optical Format | 8 or 12-bit | LT-UC10-C190NBL |
|  Lt-C1950B | 1936 x 1216 | Sony IMX392 (2.3M) | 162 fps | 3.45 µm | 73.27 dB | 1/2.3" Optical Format | 8 or 12-bit | LT-UC10-C195NBL |
|  Lt-M1950B | 1936 x 1216 | Sony IMX392 (2.3M) | 162 fps | 3.45 µm | 73.27 dB | 1/2.3" Optical Format | 8 or 12-bit | LT-UM10-M195NBL |
|  Lt-C2020B | 2064 x 1544 | Sony IMX265 (3.2M) | 55 fps | 3.45 µm | 73.56 dB | 1/1.8" Optical Format | 8 or 12-bit | LT-UC11-C202NBL |
|  Lt-M2020B | 2064 x 1544 | Sony IMX265 (3.2M) | 55 fps | 3.45 µm | 73.56 dB | 1/1.8" Optical Format | 8 or 12-bit | LT-UM11-M202NBL |
|  Lt-C2420B | 2464 x 2056 | Sony IMX264 (5.1M) | 35 fps | 3.45 µm | 73.02 dB | 2/3" Optical Format | 8 or 12-bit | LT-UC11-C242NBL |
|  Lt-M2420B | 2464 x 2056 | Sony IMX264 (5.1M) | 35 fps | 3.45 µm | 73.02 dB | 2/3" Optical Format | 8 or 12-bit | LT-UM11-M242NBL |
|  Lt-C3200B | 3216 x 2208 | Sony IMX428 (7.1M) | 50 fps | 4.50 µm | 73 dB | 1.1" Optical Format | 8 or 12-bit | LT-UC11-C320NBL |
|  Lt-M3200B | 3216 x 2208 | Sony IMX428 (7.1M) | 50 fps | 4.50 µm | 73 dB | 1.1" Optical Format | 8 or 12-bit | LT-UM11-M320NBL |
|  Lt-C3840B | 3840 x 2160 | Sony IMX334 (8.3M) RS* | 44 fps | 2.00 µm | 70.53 dB | 1/1.8" Optical Format | 8 or 12-bit | LT-UC10-C384NBL |
|  Lt-M3840B | 3840 x 2160 | Sony IMX334 (8.3M) RS* | 44 fps | 2.00 µm | 70.53 dB | 1/1.8" Optical Format | 8 or 12-bit | LT-UM10-M384NBL |
|  Lt-C4030B | 4112 x 2176 | Sony IMX267 (8.9M) | 31 fps | 3.45 µm | 73.27 dB | 1" Optical Format | 8 or 12-bit | LT-UC11-C403NBL |
|  Lt-M4030B | 4112 x 2176 | Sony IMX267 (8.9M) | 31 fps | 3.45 µm | 73.27 dB | 1" Optical Format | 8 or 12-bit | LT-UM11-M403NBL |
|  Lt-C4020B | 4112 x 3008 | Sony IMX304 (12M) | 22 fps | 3.45 µm | 73.22 dB | 1.1" Optical Format | 8 or 12-bit | LT-UC11-C402NBL |
|  Lt-M4020B | 4112 x 3008 | Sony IMX304 (12M) | 22 fps | 3.45 µm | 73.22 dB | 1.1" Optical Format | 8 or 12-bit | LT-UM11-M402NBL |

* Rolling Shutter sensors

** For LuCam software compatible part number, please use pn: LT-Lxxx-xxxxxxx

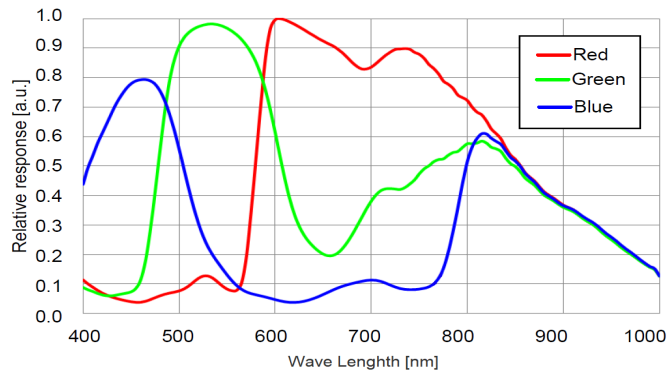
Additional Specifications Across All Models

| | |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Data Output Transfer | USB3.1 (5 Gbit/s) |
| Exposure Control | Manual and automatic control |
| I/O Ports | Locking connector; includes trigger in, strobe out, and auxiliary power input |
| Image Buffers | 128 MB |
| Lens Mount | No mount or casing for Board Level Cameras |
| Size (L x H x W) | 40.4 mm x 40.4 mm x 17.1 mm |
| Mass | 28 g |
| Operating Temp | 0 °C to 50 °C |
| Power Supply | 5V via Power Over USB |
| Power Dissipation (model dependent) | 2.3 W to 3.6 W |
| Data Connector | USB3 Type micro-B (Locking Connector supported) |
| Power and I/O Connector | JST# SM09B-NSHSS-TB (mating part :JST # NSHR-09V-S) |
| Camera Specification | USB 3.1 interface , USB3 Vision v1.0 compliant |
| Software Platform | Teledyne Sopera LT 8.6 for Windows, Lumenera Camera Software Development Kit (LINUX) or 3rd Party GenICam compliant SDK |

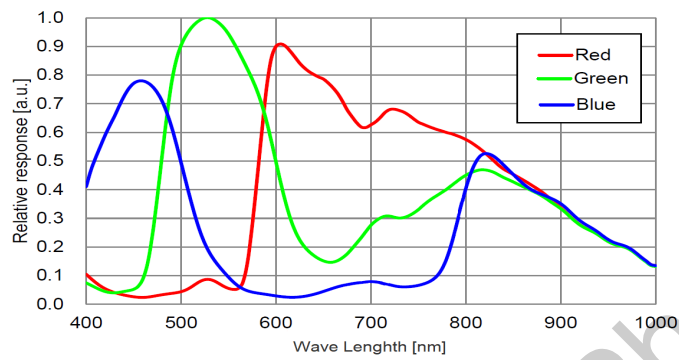


RESPONSIVITY GRAPHS

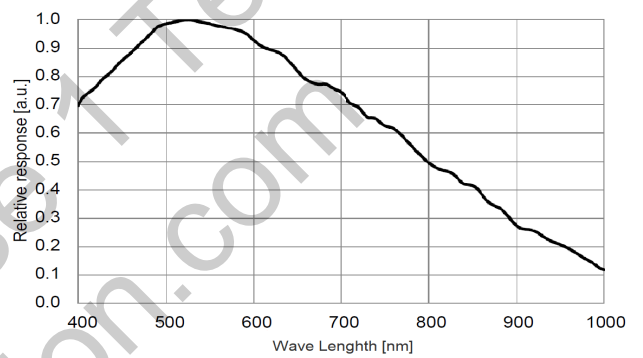
Lt-C1900B



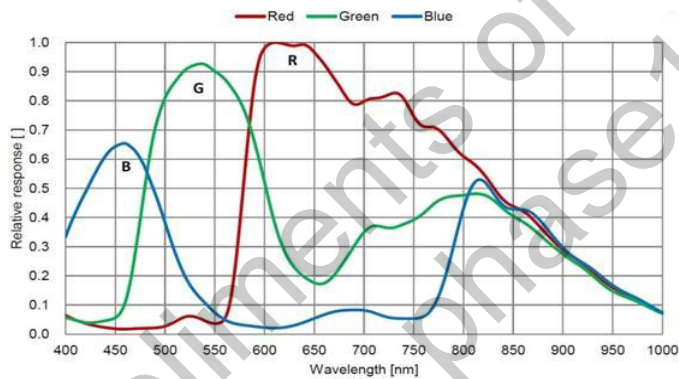
Lt-C3840B



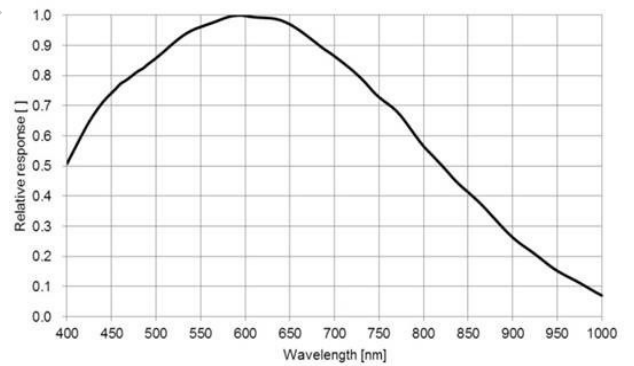
Lt-M3840B



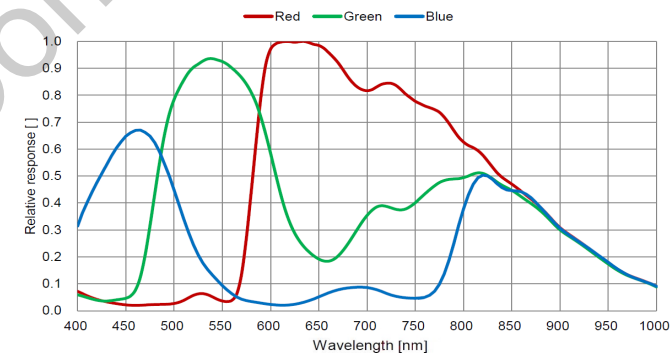
Lt-C1950B, C2020B, C2420B, C4030B, C4020B



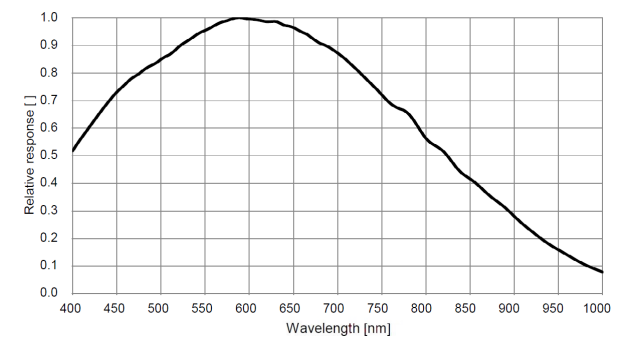
Lt-M1950B, M2020B, M2420B, M4030B, M4020B



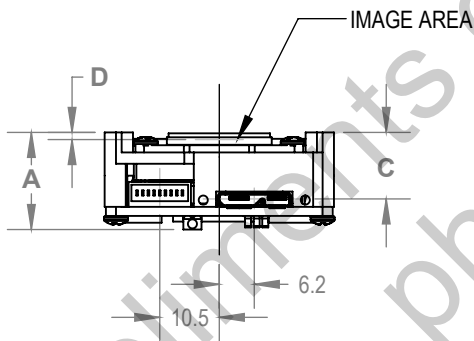
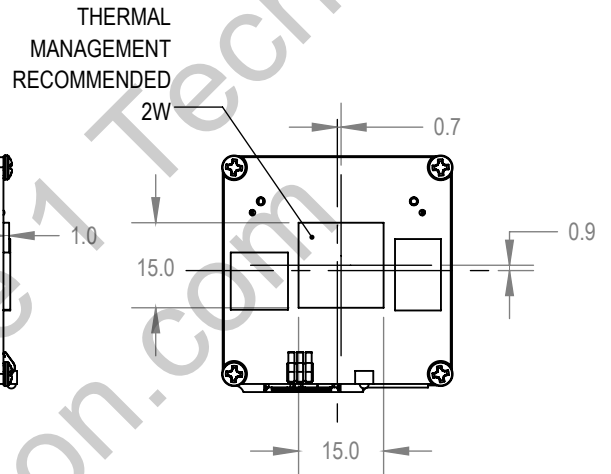
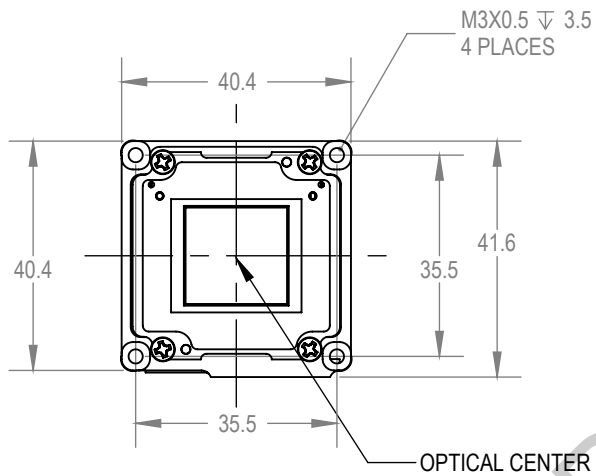
Lt-C1610B, C1630B, C3200B



Lt-M1610B, M1630B, M3200B

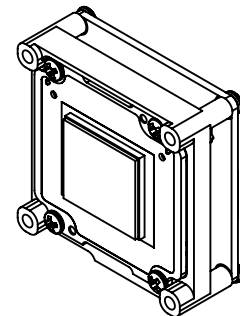


Lt Series Board Level Camera Specifications



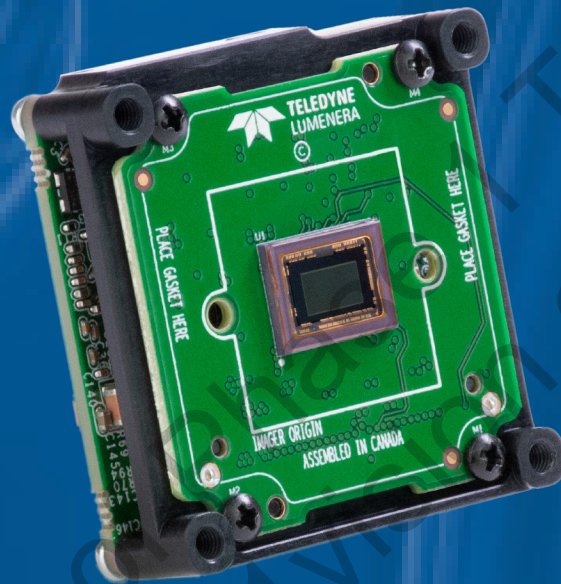
| MODELS | DIMENSION | | |
|----------|-----------|------|-----|
| | A | B | C |
| LT-1610B | 17.1 | 11.9 | 1.3 |
| LT-1630B | | | |
| LT-1950B | | | |
| LT-1980B | | | |
| LT-2020B | | | |
| LT-2420B | | | |
| LT-3200B | | | |
| LT-4020B | | | |
| LT-4030B | | | |
| LT-1900B | 14.1 | 8.9 | 1.6 |
| LT-3840B | 14.1 | 8.9 | 1.4 |

MODELS



www.teledynelumenera.com

North America
Ottawa, Canada
7 Capella Court,
(TEL) +1 613-736-4077



Versatile cameras featuring Sony Pregius & Starvis sensors

www.teledynelumenera.com

North America

Ottawa, Canada
7 Capella Court,
(TEL) +1 613-736-4077

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