LXT cameras with 10 GigE
Powerful, robust, and easy to integrate
LXT cameras

High-performance CMOS cameras with 10 GigE interface

Built around the latest global shutter CMOS sensors, these cameras offer superior image quality, very high frame rates and resolutions up to 65 megapixel. At the same time, you can also easily implement special application requirements due to an extensive scope of functions. The 10 GigE interface allows for quick and cost-effective integration. The highly robust design ensures stable operation even in demanding environments.

With LXT cameras you can rely on the full 1.1 GB/s bandwidth allowing you to simultaneously benefit from high resolution and high speed. The very short transmission times improve the response time of your system. Variations with copper or optical fiber cables offer full flexibility when implementing application solutions.

LXT camera highlights

- Detailed inspections with resolutions up to 65 MP
- High throughput with up to 1622 fps
- Easy integration thanks to a large range of functions
- Complete flexibility with 10GBase-T for M12 copper cables or SFP+ slot for optical cables
- Long-term stable image evaluation based on the robust industrial design

10 GigE – high-speed for your industrial image processing

Bandwidth: 1.1 GB/s
Transfer large data volumes of fast production processes or high-resolution images.

CPU load < 5%
Maximum bandwidth and more computing power for your application thanks to a low CPU load.

Latency 5 – 50 µs
Low latency to keep pace with ever increasing machine speeds.

10 GigE Vision

10 GigE is based on the internationally established GigE Vision® standard but provides 1.1 GB/s, which is the 10-fold speed, in addition to all the advantages:

- Cable lengths of up to 100 m for copper cables or up to 10 km for optical cables
- No need for frame grabbers or media converters
- Reliable, easy, and cost-effective integration with standard network components
- Excellent compatibility with third-party software
Easy system integration with added functionality
LXT cameras are based on a powerful platform, and their clever design and comprehensive functionality offer true added value for your machine vision needs.

✓ Exposure time from 1 µs
  Minimized motion blur of fast objects or processes

✓ Auto features: exposure, gain, white balance, color transformation
  Easy camera integration with changing light conditions

✓ Sequencer
  Quick parameter adjustment for each image for the precise control of image acquisition

✓ Burst Mode with up to 1000 images
  Utilization of the full sensor speed for image sequences also during transfer via GigE

✓ Multi ROI
  Increased frame rate or relief of data transmission

✓ Color processing with edge enhancement and noise reduction
  Improved image quality for easy evaluation

✓ Shading correction
  Easy image evaluation thanks to the correction of lens and lighting artifacts

✓ High Dynamic Range (HDR)
  Simple evaluation of light and dark areas of a scene

✓ Integrated JPEG image compression
  Save bandwidth, CPU load and storage capacity

✓ Precision Time Protocol (PTP) according to IEEE 1588
  Exact time synchronization of the images captured by several cameras in a system

✓ 4 power outputs
  Control lightings up to 120 W directly and without additional illumination controller

✓ UART / RS232
  Easy control of external devices with serial interface

✓ Liquid lens support with dynamic focus adjustment
  Easy adjustment to changing working distances

✓ Models with integrated Canon® EF mount
  Direct integration of Canon® EF lenses for the dynamic adjustment of focus and aperture

✓ M12 connector
  Reliable connection for demanding applications

✓ Operating temperature up to 65 °C
  Robust, long-term stable image acquisition

✓ Patented modular tube system (protection class IP 54, IP 67)
  Protection of the camera and lenses with various lengths and diameters from dust, dirt, and misalignment

✓ Mechanical load tests up to 100 g (IEC 60068-2-27)
  Long service life for the most discerning demands

Application areas
Across all industries, LXT cameras are the best choice when it comes to applications with strict demands on high-definition image quality, throughput, or reliability in demanding environments.

Electronics
Example: Inspection of printed circuit boards for correct assembly

Pharmaceutical logistics
Example: Track & trace in the packaging process

Transportation systems
Example: Inspection of railway overhead lines

Sports
Example: Analysis of correct swimming movements

Automotive industry
Example: 3D surface inspection
For reliable image transfer and low CPU load, we recommend the use of Intel® i7-based PCs in combination with our tested accessories:

- PCIe network cards
- Copper and optical fiber cables
- 10 GigE SFP+ transceiver
- Lenses and modular tube protection up to IP 67
- Mount adapter
- Power supply

Get further information about LX series at www.baumer.com/cameras/LX

Find your local partner: www.baumer.com/worldwide