

Lynx Overview

Our Lynx series of 'smart' cameras introduces a revolutionary new approach in camera design. We made the camera 'smart' by integrating a 32 bit RISC processor into the camera. With an embedded processor, many of the time consuming and performance limiting functions typically performed by the host computer and frame grabber can now be executed inside the camera. Not only does this free up the host processor to perform more critical image processing related tasks but also reduces the amount of bandwidth required on the camera link interface resulting in improved performance. Another distinguishing feature of the Lynx is its field upgradeability. Users can customize their camera's features by simply downloading new camera firmware or software without having to send the camera back to the factory. Another breakthrough in camera design is the Lynx's support for user downloadable look up tables. For the first time, users can create custom transfer functions using Excel, or any text editor, and download them into the camera. The above, coupled with a rich set of user configurable features, makes the Lynx an ideal solution for the most demanding vision systems.

The features of the 'Lynx' family of cameras, you will not find in any other area scan camera:

- Fully programmable.
- Firmware and software are field upgradeable.
- User defined unloadable LUT.
- Embedded 32-bit RISC processor.
- Lowest power consumption (6.00W max).
- Smallest gain steps. LYNX has 0.0351 dB steps, Dalsa is 0.1 dB steps, all other manufacturers have 4 – 6 dB steps.
- Horizontal window of interest. No limits in position and size.
- Up to 10 seconds long integration.
- Precision shutter speed (one line increment).
- Programmable strobe output (one line increment).
- Control over the number of frames to be captured in trigger mode.

How Does Lynx Compare?

- Comparable camera size. Our cameras have a cross-section of 67 mm square and they have the smallest depth. Therefore, our cameras are suitable for any application with space limitations.
- 'Lynx' family cameras have a dynamic range of 60 dB. Most other companies cannot make their cameras perform as well.
- The output depth is 8/10/12-bit selectable. Very few cameras are that adaptable.
- 'Lynx' family cameras have a gain range of 0 to 41 dB which is the best in the industry.
- 'Lynx' family cameras have no limits of position and size using the vertical window of interest commands. Other camera companies provide a set of predetermined window sizes.
- The temperature monitor feature that Imperx provides in the 'Lynx' family of cameras cannot be found in most other cameras. The temperature monitor feature is an exceptional feature for scientific imaging to measure accuracy of data.
- There are multiple triggering modes via hardware or software. Our competitors mostly provide a software trigger, with the occasional camera manufacturer providing a hardware trigger, rarely are both available in the same camera.
- Imperx provides mirror imaging. It is a very rare feature for any manufacturer to have, but quite useful in extreme applications.
- The 'Lynx' family of cameras provides a full Gamma correction tool. Other camera manufacturers provide a two points knee correction.
- Price – the lowest.