

# 2D and 3D Barcode Printing and Reading

## Lumenera Provides Lu170M and Lw230M Cameras for Producing Barcode Labels in Major Industries

Lumenera's high performance industrial digital cameras are used by industry leaders in the production and verification of complex 2D and 3D barcode labels. 2D and 3D systems use symbols rather than bars or parallel lines seen in traditional 1D barcodes.

Lumenera's Lu170M (1.3 megapixel CMOS monochrome) and Lw230M (2.0 megapixel CCD based monochrome) industrial digital cameras help decipher the finest details found in today's high resolution barcode labels.

Barcode labels are used in a variety of industries including manufacturing, automotive, retail, grocery, healthcare, and pharmaceutical. The technology is growing and extending for cell-phone users to view ads, coupons, and other information instantly. Lumenera is proud to assist these industries by providing easy to use USB 2.0 imaging solutions and a Software Development Kit (LuSDK) that can be customized to fit any application.

## Lu170M and Lw230M Used in Reading Barcodes used in Post, Distribution Hubs and Parcel Delivery

Lumenera also plays a large part in the reading of barcodes at the other end of the spectrum, by working with the foremost label reading systems.

Again, Lumenera's Lu170M and Lw230M are embedded in high-speed barcode readers. Lumenera offers custom cabling options installed and tested to customer specifications making barcode readers accessible and easy to use.

Widely deployed across Canada and the US, commercial barcode readers are typically used at the warehouse level by postal services, food distribution hubs, and parcel delivery companies.



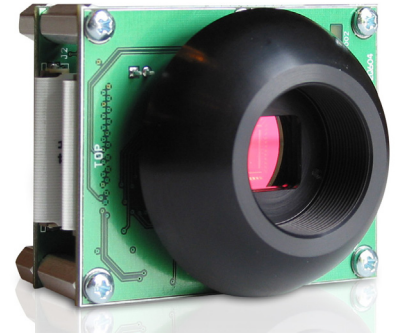
### Highlights

- Lumenera's high performance industrial digital cameras are used by industry leaders in the production and verification of complex 2D and 3D barcode labels.
- Lu170M (1.3 megapixel CMOS monochrome) and Lw230M (2.0 megapixel CCD based monochrome) industrial digital cameras help decipher the fine details.
- Lumenera also plays a large part in the reading of barcodes by working with the foremost label reading systems.
- By offering flexible and easy-to-use solutions, Lumenera is able to work on both sides of the barcode system



## Lumenera's Imaging Technology is Chosen for High Quality and Dependability

Lumenera's imaging technologies provide the high quality and dependability required across a wide variety of industry applications. By offering flexible and easy-to-use solutions, Lumenera is able to work on both sides of the barcode system - playing a part in both manufacturing and end use.



### About Lumenera

Lumenera Corporation, a division of Roper Industries, headquartered in Ottawa, Canada, is a leading developer and manufacturer of high performance digital cameras and custom imaging solutions. Lumenera cameras are used worldwide in a diverse range of industrial, scientific and security applications.

Lumenera solutions provide unique combinations of speed, resolution and sensitivity in order to satisfy the most demanding digital imaging requirements. Lumenera customers achieve the benefit of superior price to performance ratios and faster time to market with the company's commitment to high quality, cost effective product solutions. For further information about

Lumenera, please visit [www.lumenera.com](http://www.lumenera.com) or call 613-736-4077. To receive Lumenera press releases as they are issued, contact us at [marketing@lumenera.com](mailto:marketing@lumenera.com).

