

# Lumenera Provides Microscopy Cameras for Thermal Imaging

METTLER TOLEDO produces instruments used in research, scientific and quality control labs, and various industries including: pharmaceutical, chemical, food and cosmetics. Lumenera's INFINITY line of microscopy cameras is used by METTLER TOLEDO for thermal microscopy.

Thermal microscopy has benefited enormously from the recent advances in digital imaging and PC technology. In order to harness these advancements, METTLER TOLEDO leveraged the capabilities of the INFINITY family of products. When selecting a digital camera, METTLER TOLEDO had to meet the following list of strict requirements:

## Seamless camera integration Lumenera's

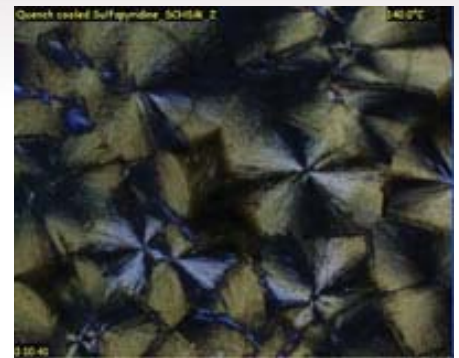
METTLER TOLEDO required a digital camera that could quickly and easily integrate with Studio Capture – a specialized software package. Lumenera's robust camera drivers and experienced technical support allowed for a successful and timely integration.

## Real-Time Image Preview

An advantage of thermal microscopy is the ability to identify changes in real time as a sample is heated or cooled. INFINITY cameras provide the ability to record changes for both hot and cold images and video files for further analysis and interpretation. This methodology has been heavily incorporated into the pharmaceutical sciences where different structures of the same chemical substance, so called polymorphs, must be identified. Patent data often relies on the detection and identification of the different physical characteristics these polymorphs exhibit.

## Variable Resolution Capability

METTLER TOLEDO found the INFINITY 1-5C camera line ideal for image capture and analytical measurements, given that the camera's variable



## Highlights

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- METTLER TOLEDO produces instruments used in research, scientific and quality control labs, and various industries.
- In selecting the INFINITY 1-5C microscopy digital camera for its thermal imaging, METTLER TOLEDO was able to satisfy all of its demanding requirements for thermal microscopy.



resolution capability can be set appropriately for video files, and also capture megapixel resolution still images.

### Ability to Record Light Intensity Changes

The latest advances in thermal microscopy include analysis of the change in the light intensity that occurs as a sample melts or undergoes other phase transitions. This allows the complete measurement to be displayed in a graphical format. The determination of changes in light intensity is also the basis of the new Sample Controlled Hot Stage Microscopy technique, in which the heating or cooling rate is automatically adjusted during the measurement.

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Lumenera's INFINITY 1-5C used by METTLER TOLEDO

#### 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).

