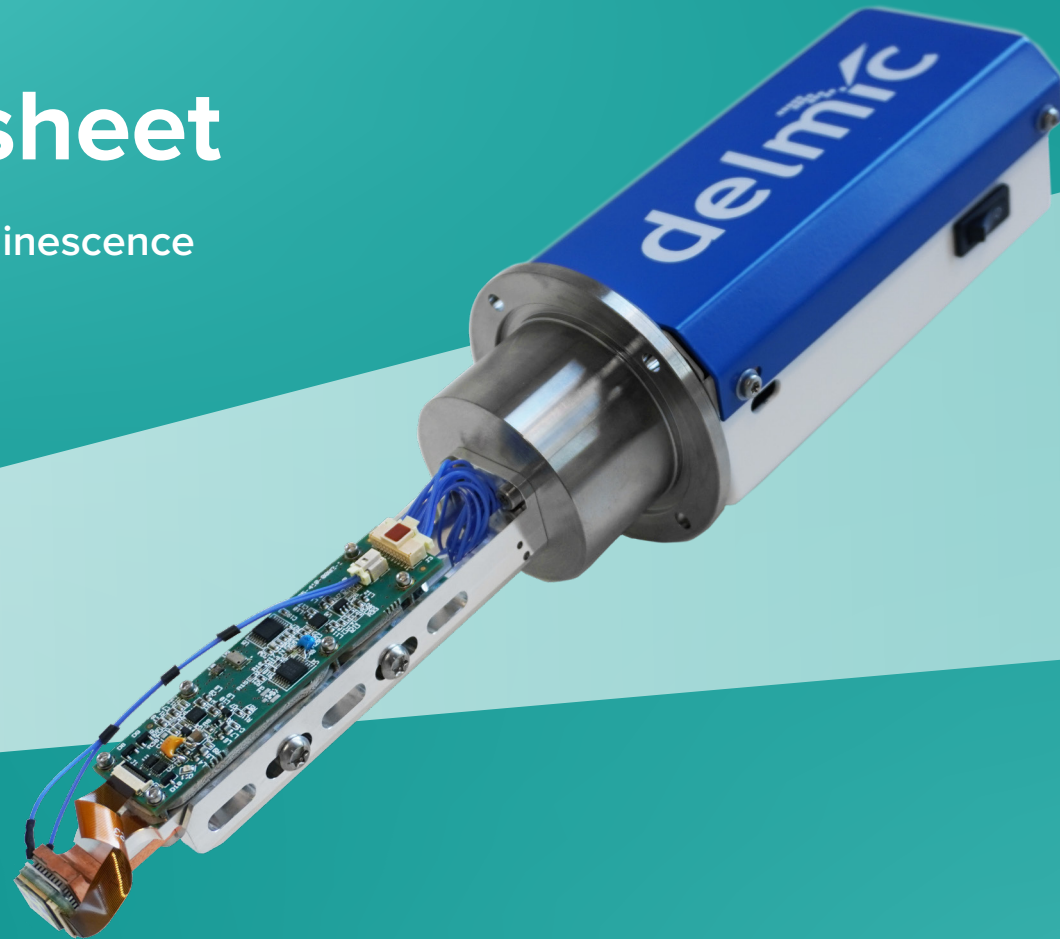


# JOLT specifications sheet

Panchromatic and RGB Cathodoluminescence  
(CL) intensity detection

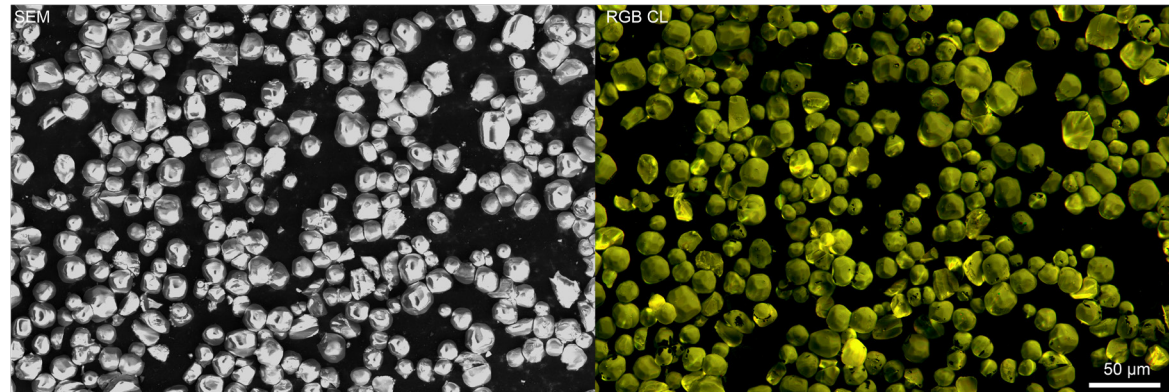


# Introduction

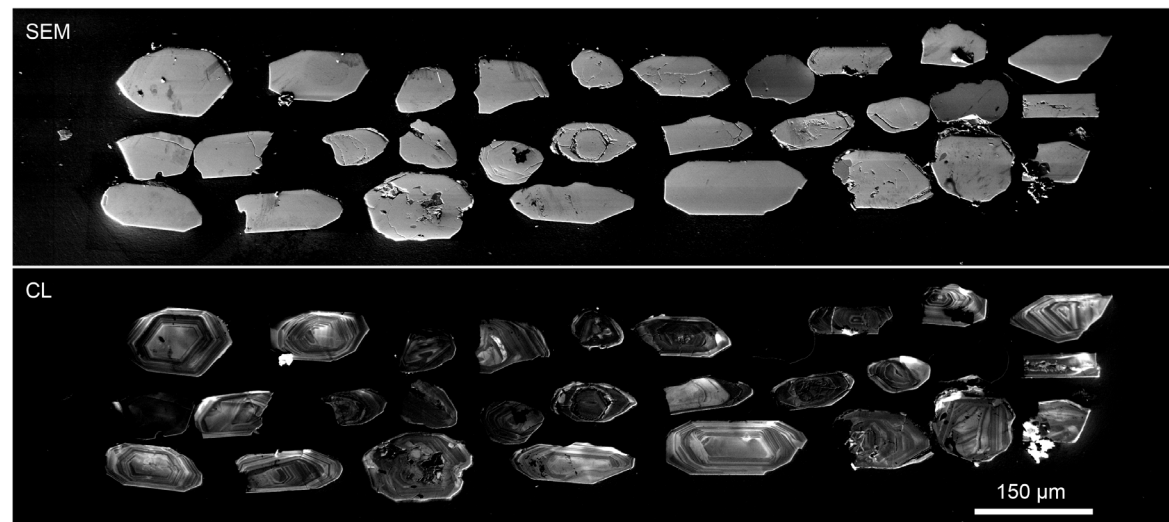
Learn more about your sample in just a few moments with the entry-level SEM-integrated cathodoluminescence (CL) detector JOLT. The JOLT is an entry-level CL-intensity detector based on state-of-the-art solid state detectors.

Delmic offers JOLT in two variations: a panchromatic version and an RGB (coloured CL) version. JOLT can be easily mounted on a single SEM vacuum port and is controlled by a software app in combination with the SEM control computer.

It is a great addition for correlative imaging with other SEM-based detectors such as backscattered electron imaging and energy-dispersive x-ray imaging, capable of providing more insight into your sample's properties. It is perfect for those who are working with and studying geological samples, semiconductors and other materials.



SEM and RGB CL image for YAG:Ce<sup>3+</sup> phosphor micropowder. Sample courtesy of Prof. Xia



SEM and panchromatic CL image for a set of zircon crystals. Sample courtesy of Beijing GeoAnalysis Co., Ltd.

# Key benefits



## Choose your version

Perform panchromatic or RGB CL detection.



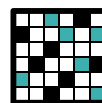
## Start imaging quickly

Operate the system easily.



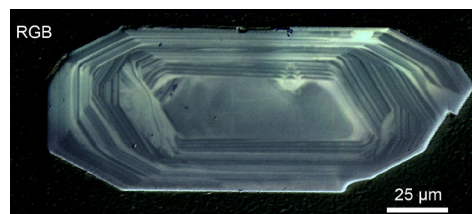
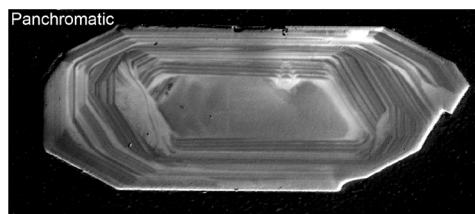
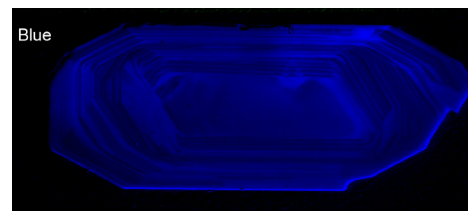
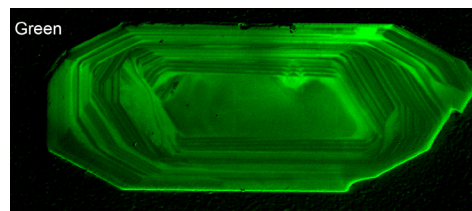
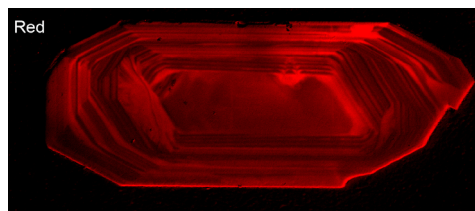
## Combine with other detectors

Harness all data available by combining CL with other SEM techniques.



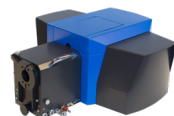
## Acquire (RGB) intensity maps

Easily obtain information about the intensity and colour of CL emission.



Red, Green, Blue, Panchromatic and composite RGB CL images of a zircon crystal. Sample courtesy of Beijing GeoAnalysis Co. Ltd.

# CL Solutions products



	JOLT	SPARC Spectral	SPARC Compact
Panchromatic intensity mapping	✓	✓	✓
RGB (colour-filtered) intensity mapping	✓	✓	✓
Spectroscopy	—	✓	—
Angle-resolved imaging	—	✓	—
Polarimetry and polarization-filtered spectroscopy	—	✓	—
Hyperspectral imaging	—	✓	—
Lens-scanning energy-momentum (LSEK) imaging	—	✓	—
Time-resolved imaging	—	✓	—
Compatibility	With all SEMs	With all SEMs	With all SEMs
Light-collection geometry	In-chamber CL detector	Paraboloid mirror	Paraboloid mirror
Software	App combined with the SEM control computer	Open-source free software ODEMIS	Open-source free software ODEMIS
Application fields	Geology, materials sciences	Geology, materials sciences, nanophotonics	Geology, materials sciences



Obtain measurements quickly and analyze data easily with the most user-friendly, flexible, and powerful cathodoluminescence detection system.

[LEARN MORE](#)



Understand more about your sample in less time with a compact, easy-to-use, turnkey cathodoluminescence detector.

[LEARN MORE](#)

# System specifications

Specifications	
CL detection	Panchromatic or RGB (with option Delmic JOLT RGB)
Installation	No alignment needed. Mounted on single port
Operation	Software app in combination with the SEM control computer
Compatability	Can be combined with other detectors for ultimate insights. Compatible with all SEM models
Technology	Based on unique high-end MPPC sensor technology
Spectral range *	320-900 nm

\* *Panchromatic version*

## Interested?

For more information on this topic visit [www.delmic.com](http://www.delmic.com)

## About

Delmic is a passionate high-tech company based in Delft, the Netherlands that develops powerful and user-friendly solutions for light and electron microscopy. Our systems are used by researchers and companies all over the world in fields ranging from life sciences, geology, material sciences to nanophotonics.

The SPARC Spectral system is a unique cathodoluminescence (CL) solution which allows you to acquire high-quality CL data in a fast and simple manner. The system is flexible, modular and can be customized according to your research needs.

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