specim

A Konica Minolta Company

SISUROCK

STATE-OF-THE-ART WORKSTATION FOR DRILL CORE LOGGING

SisuROCK is the most versatile imaging multicamera workstation for rapid and accurate core logging.

RAPID

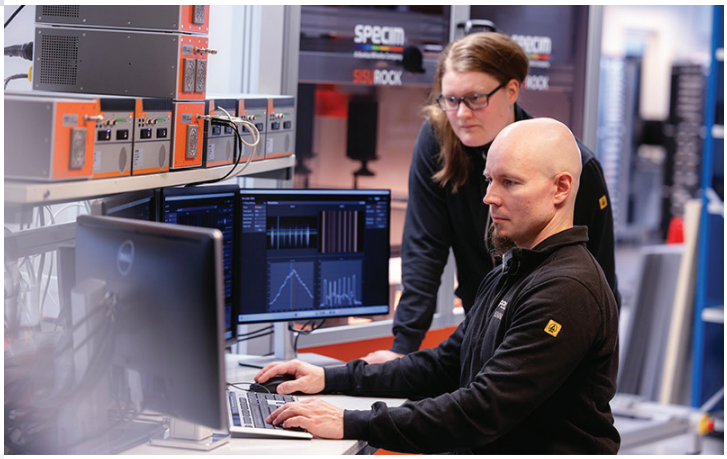
- Scans full core area in seconds.
- Scans core tray and loads next box in only two minutes.
- Scans hundreds of boxes per day, no sample preparation.

VERSATILE

- Multiple cameras from visual to thermal range for versatile imaging capabilities.
- Excellent spatial and spectral resolution.
- Double-sided illumination optimizes image quality.
- Unmatched in capturing difficult deposits, samples, and textures.

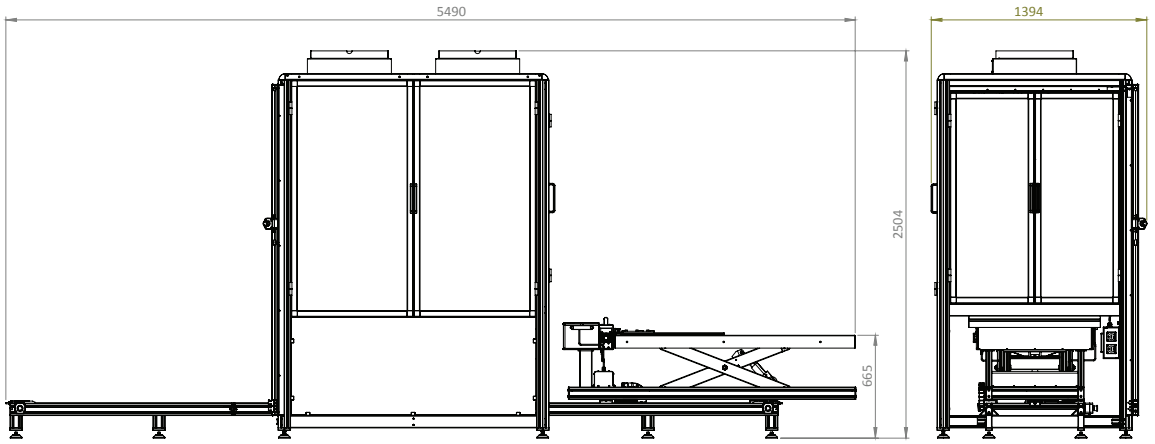
REPEATABLE

- 100% repeatable method, providing complete results.
- Get all data in digital format on first scan, no revisiting archives.
- Data can be used to produce consistent, objective mineral maps.



RELIABLE

- Well-established and reliable platform requiring minimal maintenance.
- Scientifically proofed method.









	Specim FX10e	Specim SX25	SWIR	Specim FX50	Specim FX120	RGB	3D
Spectral Range	400 - 1000 nm (VNIR)	960 - 2500 nm (SWIR)	1000 - 2500 nm (SWIR)	2.7 - 5.3 µm (MWIR)	7.7 - 12.3 µm (LWIR)	Not applicable	Not applicable
Spectral Bands	224 (with default binning of 2)	392	270-288 (number of spectral bands may vary due to the camera characteristics)	154 (with default binning)	160 (with default binning)	3 (RGB)	1
Spectral Resolution (FWHM)	5.5 nm (mean)	8 nm (mean)	12 nm (mean)	35 nm (mean)	100 nm (mean)	Not applicable	Not applicable
Number of pixels / image line across image	1024	640	384	640	616	8192	2560
Spatial sampling on target	0.016 - 0.61 mm	0.23 - 1.0 mm (restricted downwards by illumination over target)	0.16 - 1.6 mm	0.23 - 1.0 mm (restricted downwards by illumination over target)	0.40- 1.1 mm (restricted downwards by illumination over target)	0.008 - 0.08 mm	0.25 mm
Other							Vertical resolution: 0.01 mm Class 2 eye safe laser
Scan rate	More than 30 boxes / hour						
Max sample size	1500 x 650 x 200 mm (L x W x H), 50 kg						
System dimensions	5490 x 1394 x 2504 mm (L x W x H)						
Overall system weight	~ 500 kg depending on camera configuration						
Cooling requirements	No external cooling required. Air conditioned room recommended.						
Operating conditions	Laboratory type environment. Small amount of dust accepted.						
Operating temperature	0 to 40 °C, non-condensing						
Operating voltage	110 to 220 V and 50/60 Hz clean power supply						
Output data format	BIL file format, ENVI compatible						
Instrument calibration	Spectrally calibrated data. Normalization					White balance	Geometrically calibrated X-, Y- and Z-coordinates for each pixel

MINERAL IDENTIFICATION CHART

	Silicate Structure	Mineral Group	Example	VNIR	SWIR	MWIR	LWIR
Silicates	Inosilicates	Amphibole	Actinolite	Possible	Good	None	Good
		Pyroxene	Diopside	Moderate	Moderate	Uncertain	Good
	Cyclosilicates	Tourmaline	Elbaite	None	Good	Good	Moderate
	Nesosilicates	Garnet	Grossular	Possible	Possible	None	Good
		Olivine	Forsterite	Possible	Possible	Uncertain	Good
	Sorosilicates	Epidote	Epidote	None	Good	Uncertain	Moderate
	Phyllosilicates	Mica	Muscovite	None	Clear	Uncertain	Moderate
		Chlorite	Clinochlore	None	Good	Uncertain	Moderate
		Clay Minerals	Illite	None	Good	Uncertain	Moderate
			Kaolinite	None	Good	Uncertain	Moderate
	Tectosilicates	Feldspar	Orthoclase	None	None	Possible	Good
			Albite	None	None	Possible	Good
		Silica	Quartz	None	Possible	Moderate	Clear
Non-Silicates	Carbonates	Calcite	Calcite	None	Moderate	Clear	Good
		Dolomite	Dolomite	None	Moderate	Clear	Good
	Hydroxides		Gibbsite	None	Good	Uncertain	Moderate
	Sulphates	Alunite	Alunite	Possible	Good	Moderate	Moderate
			Gypsum	None	Good	Moderate	Good
	Borates		Borax	None	Moderate	Uncertain	Uncertain
	Halides	Chlorides	Halite	Uncertain	Uncertain	Uncertain	Uncertain
	Phosphates	Apatite	Apatite	Possible	Possible	Uncertain	Good
	Hydrocarbons		Bitumen	Possible	Moderate	Good	None
	Oxides	Hematite	Hematite	Good	None	Possible	Possible
		Spinel	Chromite	None	None	Uncertain	None
	Sulphides		Pyrite	Possible	None	Possible	Possible

Clear – Most suitable region for mineral identification
Good – Good response but mixtures can influence mineral characterization
Moderate – Moderate but better mineral responses in other regions
Possible – Selective response possible but mineral identification difficult
None – Non-Diagnostic responses or no responsiveness of mineral in region
Uncertain – Available spectral data insufficient to assess identification potential

Source: TerraCore

About Specim

Founded in 1995, Specim is the pioneer and leading global supplier of hyperspectral imaging solutions. We offer the broadest portfolio of hyperspectral cameras from VNIR to LWIR, imaging spectrographs, software systems, and accessories to serve industry, research, and government organizations worldwide. Specim has been a part of the Konica Minolta Group since 2020.

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