

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

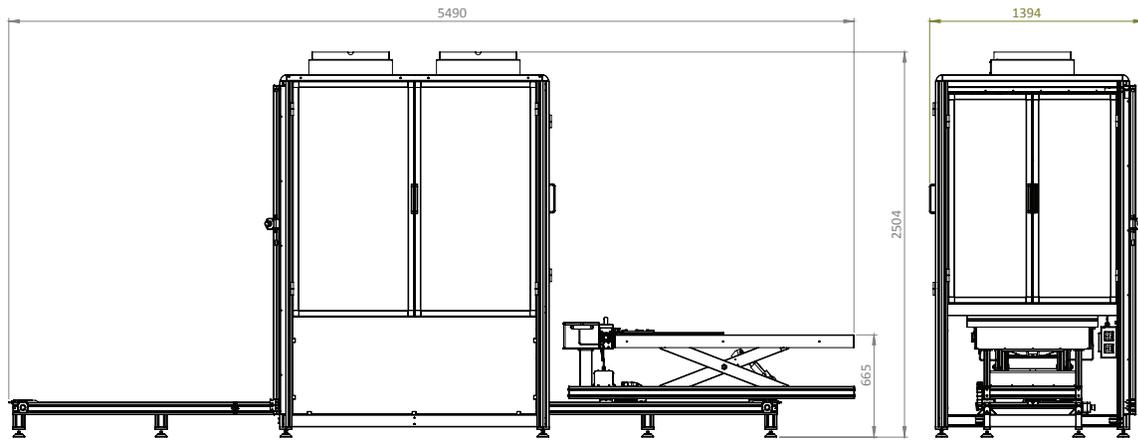
- 100% repeatable method, providing complete results.
- Get all data in digital format on first scan, no revisiting archives.
- Data can be used to produce consistent, objective mineral maps.



RELIABLE

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





	Specim FX10e	SWIR	Specim FX50	Specim FX120	RGB	3D
Spectral Range	400 - 1000 nm (VNIR)	970 - 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)	288	154 (with default binning)	160 (with default binning)	3 (RGB)	1
Optical Resolution FWHM	5.5 nm	12 nm	35 nm	100 nm	Not applicable	Not applicable
Number of pixels / image line across image	1024	384	640	616	8192	2560
Spatial sampling on target	0.016 - 0.61 mm	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					
Intrument calibration	Spectrally calibrated data. Normalization				White balance	

*) Depending on VNIR spectral binning

MINERAL IDENTIFICATION CHART

	Silicate structure	Mineral Group	Example	VNIR	SWIR	TIR / LWIR Response	
Silicates	Inosilicates	Amphibole	Actinolite	Non-Diagnostic	Good	Moderate	
		Pyroxene	Diopside	Good	Moderate	Good	
	Cyclosilicates	Tourmaline	Elbaite	Non-Diagnostic	Good	Moderate	
	Nesosilicates	Garnet	Grossular	Moderate	Non-Diagnostic	Good	
		Olivine	Forsterite	Good	Non-Diagnostic	Good	
	Sorosilicates	Epidote	Epidote	Non-Diagnostic	Good	Moderate	
	Phyllosilicates	Mica	Muscovite	Non-Diagnostic	Good	Moderate	
		Clay Minerals	Chlorite	Clinochlore	Non-Diagnostic	Good	Moderate
			Illite		Non-Diagnostic	Good	Moderate
			Kaolinite		Non-Diagnostic	Good	Moderate
	Tectosilicates	Feldspar	Orthoclase	Non-Diagnostic	Non-Diagnostic	Good	
			Albite	Non-Diagnostic	Non-Diagnostic	Good	
		Silica	Quartz	Non-Diagnostic	Inferred	Good	
Non-Silicates	Carbonates	Calcite	Calcite	Non-Diagnostic	Moderate	Good	
		Dolomite	Dolomite	Non-Diagnostic	Moderate	Good	
	Hydroxides		Gibbsite	Non-Diagnostic	Good	Moderate	
	Sulphates	Alunite	Alunite	Moderate	Good	Moderate	
			Gypsum	Non-Diagnostic	Good	Good	
	Borates		Borax	Non-Diagnostic	Moderate	TBD	
	Halides	Chlorides	Halite	Non-Diagnostic	TBD	TBD	
	Phosphates	Apatite	Apatite	Moderate	Non-Diagnostic	Good	
	Hydrocarbons		Bitumen	TBD	Moderate	TBD	
	Oxides	Hematite	Hematite	Good	Non-Diagnostic	Non-Diagnostic	
		Spinel	Chromite	Non-Diagnostic	Non-Diagnostic	Non-Diagnostic	
Sulphides		Pyrite	Inferred	Non-Diagnostic	Non-Diagnostic		

Table courtesy of Dr. Phil Harris, GeoSpectral Imaging

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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