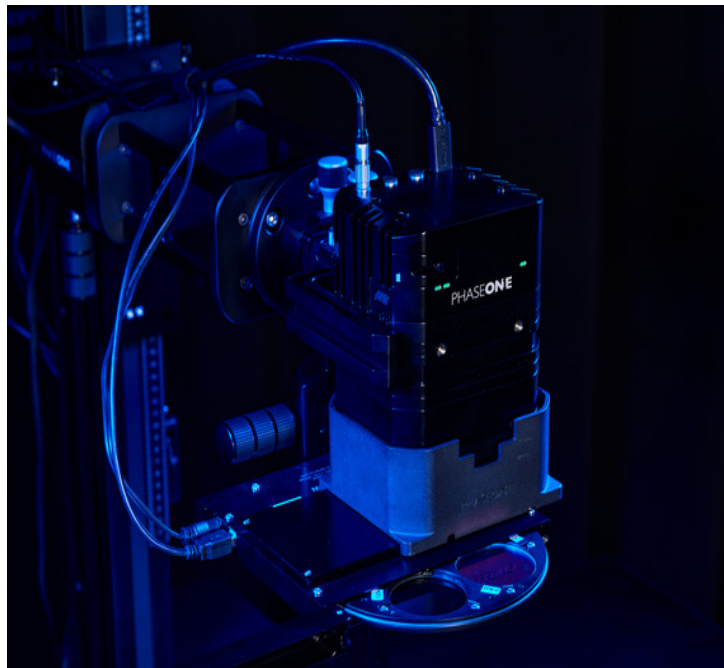
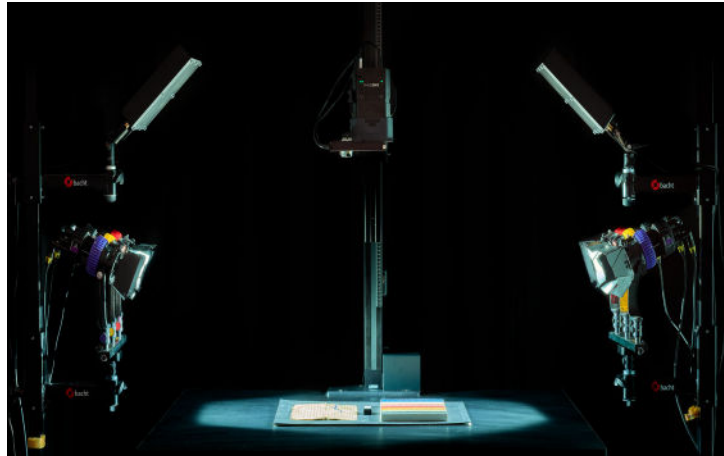


# Multispectral Imaging Solution

## Phase One Rainbow

Multispectral Imaging (MSI) captures light from a range of wavelengths – visible and invisible to the human eye – across the electromagnetic spectrum using special camera technology, light sources and filters. The “stack” of images produced by the multispectral imaging solution is used to analyze substances and surfaces to determine readability, authenticity, age and material-characterization and distribution.



### MSI outstanding benefits for analysis



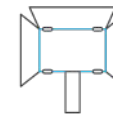
Simply place, press  
& process



Non-invasive & non-destructive  
contactless analysis



Quick first step for further  
analysis – Do it once, do it right



Non-destructive thanks to  
low energy LED lighting



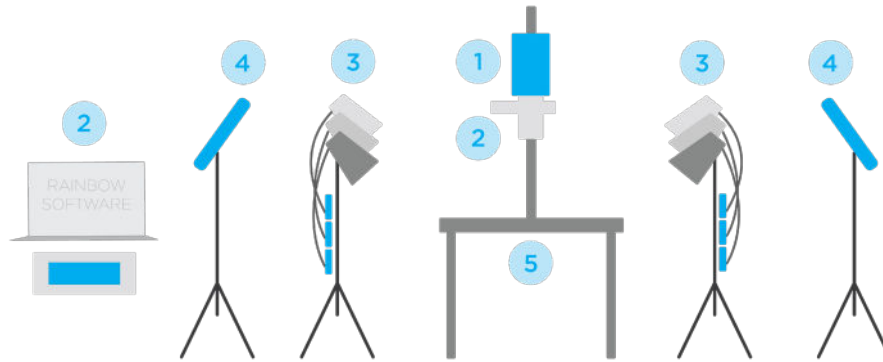
Modular & mobile  
capturing solutions

# Rainbow MSI Solution Technical specifications

	iXG 100MP WS	iXH 150MP WS	
Camera Specifications	Sensor size	53.4 x 40.0	53.4 x 40.0
	Resolution	11608 x 8708	14204 x 10652
	Pixel size (µm)	4.6µm	3.76 µm
	ISO Range	50 - 800	50 - 800
	Data Interface	USB3	USB-C/ 10G Ethernet
	File Formats	Raw 14bit, Raw 16bit	
	Lenses	Schneider Kreuznach RS 72mm and/or 120mm	
	Weight (gr) with 72mm lens	2,300 inc. L - Bracket	2,500 inc. L - Bracket
	Dimension (mm) with 72mm lens	174 x 130 x 130 inc. L - Bracket	177 x 130 x 130 inc. L - Bracket
	Approvals	FCC Class A, CE, RoHS	
	Operating Temperature (°C )	0 to 40	
	Operating Humidity ( % )	15 - 80 (non-condensing)	
	Accessories	S8612 filter for normal photography with stepping rings for lenses. Custom lens shade suited for the supplied filter wheel.	

	Narrowband Solution	Multiband Solution	
System Specifications	Included LED lights	Wavelengths (µm): 365, 385, 410, 420, 450, 480, 510, 530, 550, 600, 630, 640, 660, 740, 850, 940	Narrowband UV, white light and narrow- and wide-band IR
	Configuration	2 panels with 16 LEDs in each	2 banks of 3 lights
	Filter Wheel (5- position)	Included, controlled via USB	
	Communication with lights and filter wheel	USB via 7 - port powered hub	
	Light stands	Not included	
	Workflow Software	Phase One Rainbow MSI software	
	Output	Monochrome stack of 16 bit TIFF files ready for statistical analysis	Stack of 8 16 bit TIFF files compatible with the Charisma guidelines
	Output Luminescence	Output luminescence, user defined	

## Solution at a Glance



1. iXG 100MP or iXH 150MP Wide Spectrum camera incl. magnetic IR/UV cut filter & hood
2. MSI accessory kit incl. Filter wheel, mounting rail, USB hub, PC and software
3. Multiband lights, including filters, power supplies and USB power switches\*
4. Narrowband Lights\*
5. Copystand (desktop/ floor/ wall)\*

\*Light stand and copystand not included

## Phase One Rainbow Unique Features

1. **Flexible and Mobile Capturing Solutions** with iXG 100MP or iXH 150MP Wide Spectrum camera system, filter wheel, and flexible lighting options of Multiband Lights for visual analysis (CHARISMA method) and Narrowband Light for statistical analysis.
2. **Fully automated high-resolution** capture workflow, including all relevant calibration stages and the full capture Stack.
3. **One button repeatable, accurate and simple workflow with Phase One MSI Software** which delivers the **Perfect Stack** of normalized images according to the chosen lighting method (Multiband or Narrowband).
4. Designed for **Multispectral as well as for High volume standard digitization**. Easy switch by using the provided UV/IR cut filter on the lens for standard digitization.
5. **Ultimate Image quality** throughout the spectrum, **from UV (365 nm), through visible, into IR (ca. 1050 nm)**, with:
  - **iXG 100MP or iXH 150MP Wide Spectrum Camera, high dynamic range CMOS-sensor.**
  - **72mm and 120mm iXG lens** line with extension tubes.
  - **One million guaranteed actuations** with Phase One Reliance shutter, and option for infinite Electronic Shutter actuations.
6. **Responsive Live View** for fast and accurate positioning of the subject-matter.
7. **Phase One MSI Knowledge Center** provides Network of Multispectral affiliates, Phase One experts and support specialists to bring best practice to any potential customer or project.

