



Right: Image of The Magdalen NG719 taken with the Apollo, by kind permission of the National Gallery (London)



OSIRIS AND APOLLO. THE WORLD'S LEADING INFRARED REFLECTOGRAPHY CAMERAS

Infrared Reflectography (IRR) is a non-invasive method of studying a painting by looking beneath the visible layers of paint. This allows you to examine the underdrawings along with any changes or pentimenti present in the work.

Osiris is the original world leading specialist camera designed specifically for use in Infrared Reflectography. Created in collaboration with the National Gallery (London), Osiris was the first infrared imaging system to provide high-resolution, high-speed images in a portable camera. It provided the springboard for us to go on and develop our Apollo camera, a new standard in Infrared Reflectography.

Apollo uses an internal scanning mechanism to produce high-quality, high-resolution infrared reflectograms with an unparalleled level of clarity and detail. If you are looking to create detailed, high quality, high resolution infrared images, Apollo is the IRR camera system for you.

The modern cooling sensor technologies, with higher resolution and improved sensitivity, reveal a painting's secrets like never before.

Advantages of the Apollo are:

- Higher resolution (up to 26MP images)
- Higher image quality due to high dynamic range (HDR)
- Fully supported custom software
- Advanced automated stitching
- Adjustable histogram and image display
- 16bit data allows you to explore detail in both light and dark regions
- Flight case with wheels

Allowing you to capture an artwork's mysteries with more clarity than ever before.

The Apollo and Osiris are both portable and accessible, ready to follow wherever your research takes you.



opusinstruments.com

TECHNICAL SPECIFICATIONS



Madonna Lactans, by kind permission of Kunstmuseum Basel



	Apollo	Osiris
Operation wavelength	0.9 – 1.7µm	0.9 – 1.7µm
Sensor	128 x 128 px InGaAs area sensor	InGaAs line array
Sensor Cooling	Yes	No
Lens	6 element 150mm focal length F/8 - 11	6 element 150mm focal length F/5.6 - F45
Image size	Up to 26MP User selectable horizontally and vertically: 128 x 128 to 5100 x 5100 pixels	User selectable horizontally and vertically 512 x 512 to 4096 x 4096 pixels
Image Output	16bit TIFF, FIT, PNG, 8bit JPG (User selectable)	Bitmap
Integration time	Adjustable up to 50ms	Fast scan 1 ms Slow scan 10 ms (50HZ mains frequency) 8.3 ms (60HZ mains frequency)
Full image Acquisition time	15 -20 minutes (depending on integration time)	Fast scan: 2 minutes Slow scan: 10 minutes
Grey levels	65,000	256
Field of view	40° Horizontal x 40° Vertical	40° Horizontal x 40° Vertical
Object Field	200mm to infinity	200mm to infinity
Focusing	Live software preview with focus assist	Fast preview on screen with zoom
Operating system	Windows™ 10 (PC not supplied)	Windows™ 10 (PC not supplied)
Power supply	100-120V, 200-240V 50 60Hz	100-120V, 200-240V 50 60Hz
Interface	USB 2.0	USB 2.0
Dimensions	220x220x340mm (9"x8"x12") at closest working distance	220x220x340mm (9"x8"x12") at closest working distance
Case dimensions	229x351x559 mm (9"x14"x22")	229x351x559 mm (9"x14"x22")
Weight	~4.05kg (9lb)	~4.35kg (9.6lb)
Weight in case	~12.05kg (26.6lb)	~11.85kg (26lb)
Mechanical interface	1/4" and 3/8" tripod mount (tripod not supplied)	1/4" and 3/8" tripod mount (tripod not supplied)
Storage temperature	0°C - 50°C non condensing	0°C - 50°C non condensing
Operating temperature	10°C - 35°C non condensing	10°C - 35°C non condensing

