

Portable Raman Spectroscopy for Art & Archaeology Applications

BWTEK
A Metrohm Group Company

Portable Raman Spectroscopy is widely used for the analysis of paintings, ceramics, statues (surface coatings), and other artifacts. The flexibility of fiber optics in conjunction with the non-destructive and non-contact nature of Raman spectroscopy allows measurements to be made in-situ. The chemical information gained from Raman analysis can guide conservation work, and verify authenticity.

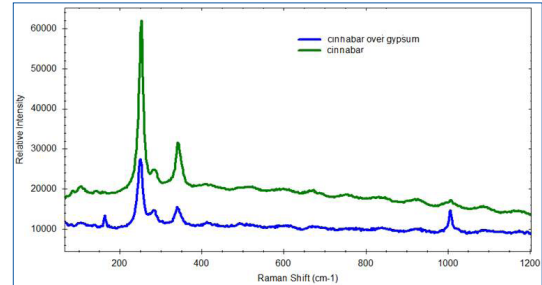
Our lightweight rugged design, various laser excitation and battery options allow you to carry these high performance systems into the field, thus allowing you to maintain the integrity of important heritage sites, and is in line with requirements of conservationists and archaeologists.

Our i-Raman series has been widely implemented in the fields of art, archeology and geology for applications such as:

- Analysis of pigments in tapestries, and on artwork in caves, ceilings, and other structures
- Analysis of organics and inorganics in ancient paintings to determine authenticity and guide conservation work
- Analysis of environmental effects such as corrosion, oxidation and degradation of artwork
- Analysis of archaeological artifacts in difficult to reach places with a tripod-mounted video microscope

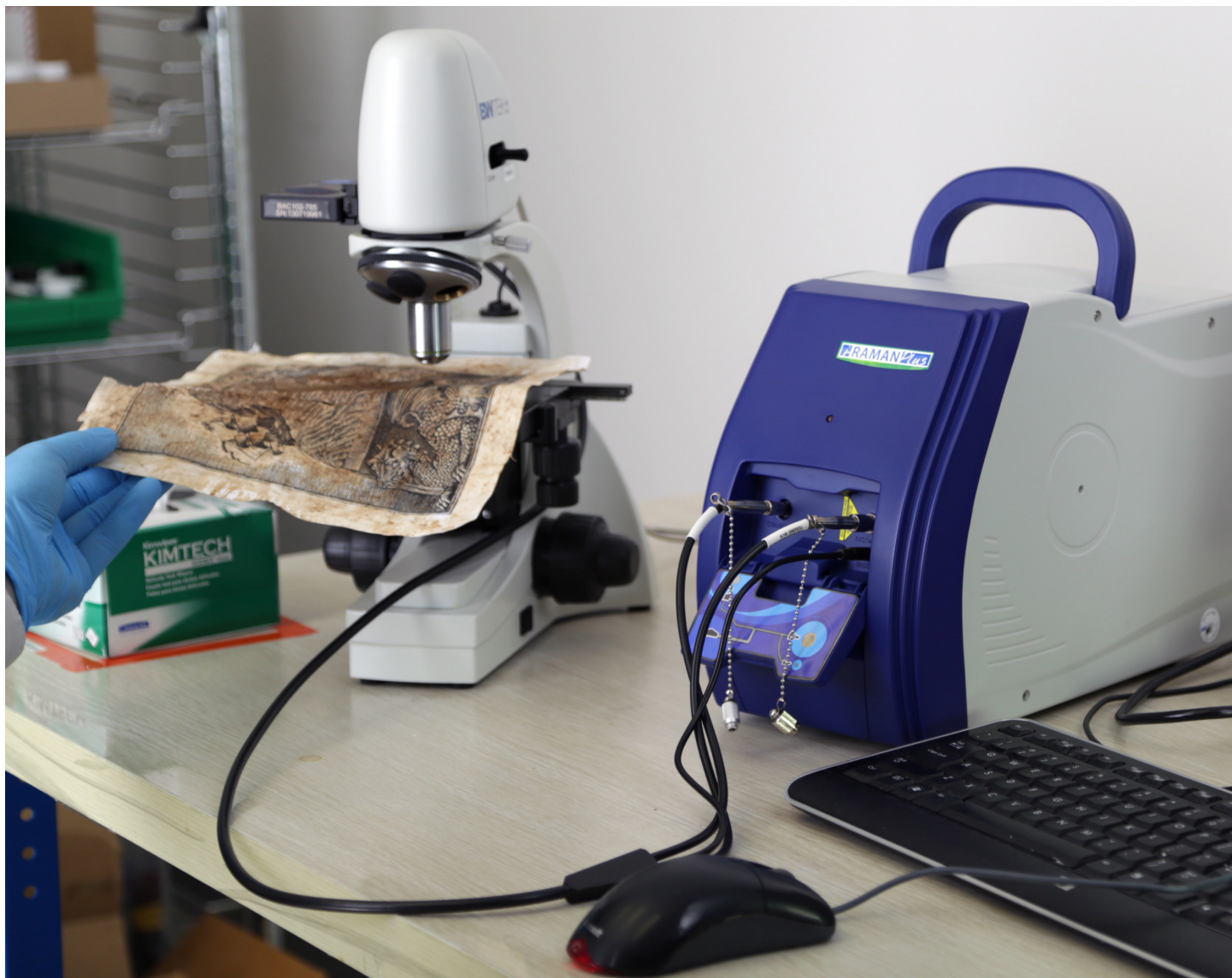
Key Advantages of the i-Raman Series:

- Laser power adjustable down to 1%
- Small size, light weight, fiber-optic probe system, easy to take to work site
- Battery option for in-field use
- Detachable microscope head; customized tripod to hold camera head
- BWID software with optional libraries for pigments and dyes, minerals, and inorganic materials
- Proven track record evidenced by published research which uses i-Raman series of instruments



i-Raman® Series Set-Up for Applications in Art & Archaeology

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To perform high quality measurements for these applications, you will need:

- i-Raman Plus 785/532 S and i-Raman Prime models with spectral range down to 65 cm^{-1}
- Battery Pack
- Video Microscope with Detachable Camera Head (BAC151B)
- Tripod and adaptor for remote sampling
- B&W Tek's Identification Software (BWID)
- Raman Signature Libraries for Easy Identification (dyes, pigments, minerals and inorganic materials)
- Quantitative Analysis Software options available (BWIQ and Vision)