## Handheld **XRF** Spectrometer

### Bruker TRACER 5 pXRF

TRACER 5 is the high value in-situ pXRF performer. By synchronizing power, function, precision and accuracy for dynamic, field capable laboratory-like elemental analysis, the TRACER 5 provides unprecedented capabilities.

All settings and measurements can be customized directly on the handheld analyzer and viewed with Artax™ advanced spectral analysis PC software, via WiFi or USB. The internal CMOS Camera allows for sample visualization and precise alignment. The integrated process and data storage has space for multiple photos to be saved for later review.

Users can develop their own calibrations with EasyCal PC software for empirical correlations. These can then be transferred to the TRACER 5 operating system for point-and-shoot tests.

### **FEATURES**

### **Untethered & Interactive**

- Integrated display embedded operating and analytical software
- Relaxed Hand Grip<sup>™</sup> strap for comfort and security
- EasyAccess<sup>™</sup> Rail for on-the-go accessories
- Control, save and send with USB, Wi-Fi, Bluetooth

#### Fast, accurate spot positioning

- Internal camera with adjustable LED for full view
- Target area and reticle positioning for precision
- Remote view projection for challenging objects
- Confidence in analytical results

### **High Performance**

SharpBeam<sup>™</sup> geometry for minimized distance between sample and detector

- · Pressure and temperature monitoring and compensation
- Operator controlled, motorized 5 position primary beam filter wheel;
- Air, helium or vacuum capable
- Most sensitive TRACER available

### Complete user control

The TRACER 5i allow complete user control of the excitation conditions. These can be developed using recommended settings in the software or user preferences.

- Current
- Voltage
- Automated filter
- Manual filter
- Sample spot size
- Vacuum, Helium or

air

### **APPLICATIONS**

- · Soil Analysis for Archaeological Science
- Art conservation
- Research & Teaching
- Obsidian Composition Analysis: Sourcing Obsidian
- · Archaeometry and Archaeological Science
- Mudrock/Shale Chemostratigraphy
- Strategy for Developing and Calibrating Shale and Mudstone Chemostratigraphies
- Food Safety & Agriculture

### CALL GEOTECH TODAY (800) 833-7958

### Geotech Environmental Equipment, Inc. 2650 East 40th Avenue • Denver, Colorado 80205

(303) 320-4764 • (800) 833-7958 • FAX (303) 322-7242 email: sales@geotechenv.com website: www.geotechenv.com

- - NAGPRA Compliance
  - Nondestructive Testing (NDT)
  - · Elemental analysis
  - Pigment analysis
  - Meteorite Testing & Analysis



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### **SPECIFICATIONS**

Excitation Source	Rhodium (Rh) thin window X-ray tube; X-ray generator 6 - 50 kV with 4.5 - 200 $\mu$ A, max. 4 Watt output; operator adjustable current and voltage
Detector	Graphene (g) window silicon drift detector (SDD), 20 mm2 detector area, typical resolution < 140 eV at 450,000 cps
Pressure/Temperature Compensation	Yes
Spot Size	Selectable collimation includes 3 and 8 mm
Filters	Selectable automated internal 5 position filter changer with pre-installed filters; manual insertion filter/secondary target slot for factory or user-made filters; two manual filter holders
Geometry	Features patented SharpBeam <sup>™</sup> beam path for best performance at low power.
Beam Path	Selectable beam path: vacuum, helium or air
Elemental Range	Air: Sodium (Na) to Uranium (U); Helium purge: Fluorine (F) to Uranium (U)
Sample Temperature	Default to 150°C (302°F) with Ultralene® window.
Internal Camera	Internal VGA CMOS camera (640 x 480 pixels) with ability to store up to 5 photos
Weight	1.9 kg (4.1 lbs.) with battery or 1.6 kg (3.6 lbs.) without battery
Dimensions L x W x H	27.3 cm x 9.4 cm x 29.5 cm (10.75 in. x 3.7 in. x 11.6 in.)
Testing Modes	Spectrometry, Precious Metals
Convenience	TrueTouch™ trigger switch, ambidextrous Relaxed Grip Strap™ and EasyAccess™ rail mount for accessories
<b>Operating Environment</b>	Operating Temp: -10°C to +50°C (+14°F to 122°F); 10% -90% Humidity; Splash and dust proof (IP54)
Power	Li-Ion battery; Battery Charger; AC adapter
Interactive Touchscreen	9.4 cm (3.7 in), LCD (TFT active matrix), 640 x 480 pixels, resistive touchscreen.
PC Operating System	Windows® 7, Windows® 8 or Windows® 10
Control Software	Full control OS on analyzer; Bruker Instrument Tools PC software
Analysis Software	Point-and-shoot and live spectra on analyzer; point-and-shoot, live spectra and full qualitative, semi-quantitative and quantitative software on PC (Artax & EasyCal software included)
Data Storage	Direct storage on USB Thumb Drive; data transfer to PC via USB or Wi-Fi; Bluetooth connectivity for accessories
Data Transfer	USB Data storage, I/O ports, Wi-Fi and Bluetooth connectivity to save and transmit data from the field
System Safety	Password protection; no sample (backscatter) shutoff, IR proximity sensor
Languages	Chinese, Chinese simplified, Dutch, English, French, French Canadian, German, Indonesian, Italian, Japanese, Korean, Polish, PortugueseBR, Russian, SpanishMEX, SpanishSPN, Thai, Turkish
Certification	CE, cTÜVus, FCC part 15

Specifications subject to change without notice.

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### **CALIBRATIONS**

- Obsidian
- · Heavy Metals and Elemental Nutrients in Soil
- Mudrock
- Alloy LE
- Soil LE
- GeoChem LE
- GeoExploration
- Limestone
- Restricted Materials
- Food Safety
- Food Quality
- Ceramics
- Industrial LIP
- Precious Metal LE
- LowPbiCu
- Maritime Sulfur
- Filter and Dust Wipe

### **APPLICATIONS & MATERIALS**

TRACER pXRF analyzers serve a wide range of applications and material needs from everyday point-and-shoot testing to the ever-changing complexities of advanced applications and research.

Whether it is in art conservation and archaeology, for teaching, in food safety and agriculture applications, for geochemistry or advanced materials, TRACERs can thoroughly and accurately analyze the elemental composition and identify standard or complex materials.

TRACERs can analyze multiple sample types, including liquids, slurries, powders, soils, sediment, sludge, cellulose, polymers, paper, solids, metals and alloys.



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