

Handheld XRF Spectrometers

Bruker CTX

The CTX is a portable counter top XRF that is small, light-weight, safety interlocked, and battery operated. At 14cm wide and only 7kg in weight, this XRF can analyze up to 48 elements, from Magnesium to Uranium. It features the latest graphene window SDD detector, Patented DetectorShield™ for long term performance and minimal service, and DetectorShield™ collimator. The Bruker CTX detects concentrations from part per million to 100%. It was created to be use not only in the laboratories, but out in the field and it has a durable splash and dust proof stainless steel design with dual safety interlock.

The CTX is available in three high-performance configurations, all sharing the same advanced detector technology. The CTX 500 is designed for the simple and fast analysis of heavier elements, starting from sulfur. The CTX 500S model is the fast and easy-to-use analyzer which can measure both light and heavier elements simultaneously. The CTX 800 is the premium model with the best performance the widest application range and best light element performance for Mg, Al and Si.

BENEFITS

- **Available calibrations include:**
Up to 48 Elements, from Magnesium (Mg) to Uranium (U).
- **Superior Graphene window SDD detector technology**
- **Patented DetectorShield™**
- **High Speed Pulse Processing Electronics**
- **Lower detection limits**
- **Detects concentrations from part per million(ppm) to 100%**
- **Safety interlocked sample chamber,**
- **W x D x H = 12 cm x 13.5 cm x 8.5 cm(4.7 in x 5.3 in x 3.3 in)**
- **Sealed against moisture and windblown dust, sealed spill plate protects X-ray tube and detector for long term performance**
- **Operating temperature -10°C to +40°C**
- **Industrial, easy access, front touchscreen display**

SHARPBEAM™

The CTX patent pending SharpBeam™ technology optimizes the detector and tube geometry. The optimized geometry has many desirable effects, including:

- **Reduces power requirements**
- **Reduces weight**
- **Improves measurement precision**
- **Improved detection limits**
- **Increases battery life**

APPLICATIONS

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> • Positive Material Identification (PMI) • Aerospace Alloys • Gold Testing • Precious Metal Alloy • Mining and Exploration | <ul style="list-style-type: none"> • Ore Grade Control • Core Analysis • Food Safety & Agriculture Solutions • Geochemical Mapping • Soil Analysis • Metal Recovery | <ul style="list-style-type: none"> • ASTM-F963 • Toxics in Packaging Clearing House (TPCH) • Lead in Children's Products & Clothing • Proposition 65 Compliance • RoHS • More |
|--|---|---|



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

Handheld XRF Spectrometers



Bruker CTX

SPECIFICATIONS

Module	CTX 800	CTX 500S	CTX 500
Excitation Source	Rh target X-ray tube, 4W. 6-50kV, 5-200µA	Rh target X-ray tube, 2W. 15-29kV, 5-100µA	Rh target X-Ray tube, 2 W, 15 - 40 kV, 5 - 100 µA.
Detector	Graphene window silicon drift detector (SDD), 20 mm ² detector area, typical resolution < 145 eV at 450,000 cps including Detector Shield™		
Spot size	8 mm standard, 5 or 3mm optional	8 mm	
Filter	Five (5) position automatic filter changer	No filter	fixed Al/Ti filter
Elemental Range	Mg – U		S - U
Color CMOS Camera	optional (640 x 480 pixels)		
Sample Temperature	Default to 150°C (302°F) with Ultralene® window. Up to 500°C (932°F) with Kapton® window and hot surface adapter.		Operating temperature -10°C to +40°C
Pressure/Temperature Compensation	No		
Detector Shield™	Included		
Geometry	Features patented SharpBeam™ beam path for best performance at low power		
Beam Path	Air		
Weight	approx. 7.5 kg (15.6 lbs) including battery		
Dimensions	W x D x H: 13.5 cm x 13.8 cm x 25 cm (9.8 in x 5.3 in x 13.8 in)		
Testing Modes	Assay, Grade ID, Grade Pass/Fail, Limit testing		
Operating Environment	Operating temperature -10°C to +40°C; Splash/dust resistant enclosure.		
Power	Li-Ion battery (7.2 V nominal), Battery charger, AC adapter (9 V DC @ 3 A)		
Interactive Touchscreen	9.4 cm (3.7 in.) integrated color touchscreen LCD; TFT active matrix; 640 x 480 pixels; 64k color; resistive touchscreen.		
Control Software	Full control OS on analyzer and on PC software		
PC Operating System	Windows® 7 or Windows® 10; Microsoft Excel or Bruker proprietary software for report generation & spectrum viewing.		
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 optional)		
Data Storage	512MB Internal; external USB data storage		
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, cTUVus, IEC 61010-1:2010 by TÜV SÜD, EN 61326-1:2006		

Specifications subject to change without notice.

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