

## NEX QC specifications

### Excitation

- 50 kV X-ray tube
- 4W max power
- 6 tube filter positions with shutter

### Detection

- High performance semiconductor detector
- Peltier thermo-electric cooling
- Optimum balance of spectral resolution and max count rate

### Sample Chamber

- Large 190 x 165 x 60 mm sample chamber
- Single position 32 mm sample aperture
- Single position 40 mm sample aperture
- Bulk sample aperture
- 6-position 32 mm automatic sample changer
- 5-position 40 mm automatic sample chamber
- Single position 32 mm sample spinner
- Analysis in air or helium

### Software & Application Packages

- Qualitative and quantitative analysis
- Normalization and validation feature
- Fundamental parameters
- Data export function with LIMS compatibility
- User selectable shaping times
- Simple flow bar wizard to create new applications
- Icon driven graphical user interface

### Environmental Conditions

- Ambient temperatures 10 – 35°C (50 – 95°F)
- Relative humidity <85% non condensing
- Vibration undetectable by human
- Free from corrosive gas, dust, and particles

### User Interface

- 8" WVGA touch screen interface
- Embedded computer
- Internal thermal printer
- USB & Ethernet connections

### Spectrometer Data

- Single phase AC 100/240V, 1.4A (50/60 Hz)
- Dimensions: 331 (W) x 432 (D) x 376 (H) mm (13 x 17 x 14.8 inch)
- Weight: 16 kg (35 lbs)

### Options

- 6-position 32 mm automatic sample changer
- 5-position 40 mm automatic sample chamber
- Single position 32 mm sample spinner
- Helium purge
- Fundamental parameters



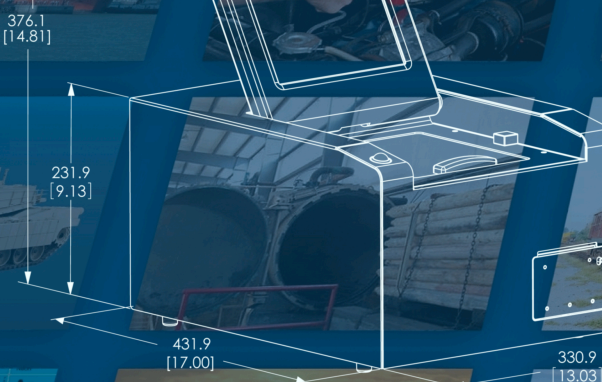
Analyze large samples.



Single position analysis.



32 mm or 40 mm autosampler.



# NEX QC

## Low Cost Benchtop EDXRF Elemental Analyzer



# Rigaku

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## Analyze sodium (Na) through uranium (U) in solids, liquids, powders and alloys

**ELEMENTAL ANALYSIS**

Na 11	Mg 12											Al 13	Si 14	P 15	S 16	Cl 17	Ar 18	
K 19	Ca 20	Sc 21	Ti 22	V 23	Cr 24	Mn 25	Fe 26	Co 27	Ni 28	Cu 29	Zn 30	Ga 31	Ge 32	As 33	Se 34	Br 35	Kr 36	
Rb 37	Sr 38	Y 39	Zr 40	Nb 41	Mo 42	Tc 43	Ru 44	Rh 45	Pd 46	Ag 47	Cd 48	In 49	Sn 50	Sb 51	Te 52	I 53	Xe 54	
Cs 55	Ba 56	La 57	Hf 72	Ta 73	W 74	Re 75	Os 76	Ir 77	Pt 78	Au 79	Hg 80	Tl 81	Pb 82	Bi 83	Po 84	At 85	Rn 86	
Fr 87	Ra 88	Ac 89																
			Ce 58	Pr 59	Nd 60	Pm 61	Sm 62	Eu 63	Gd 64	Tb 65	Dy 66	Ho 67	Er 68	Tm 69	Yb 70	Lu 71		
			Th 90	Pa 91	U 92													

## Elemental analysis for quality control applications

Rigaku NEX QC delivers rapid qualitative and quantitative determination of major and minor atomic elements - from sodium through uranium – in a wide variety of sample types. Offering simplicity of operation with a modern "icon driven" smartphone style user interface, the instrument design was optimized for the demands of production process control environments. An integrated computer and thermal printer provide full functionality without external devices, while built-in Ethernet allows seamless networking to LIMS or other control systems. Options include a fundamental parameters software module for reducing the number of required calibration standards, an automatic sample changer, sample spinner and helium purge for enhanced light element sensitivity.

## Typical applications span industry and academe



Wood Treatment



Cement



Petroleum - PetroChem



General Analysis



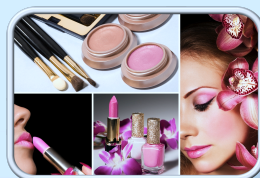
Minerals



Nutraceuticals



Education



Personal Care Products



Mining & Refining



Coating Thickness

Analyze <sup>11</sup>Na through <sup>92</sup>U non-destructively

Solids, liquids, pastes, slurries, emulsions, minerals, alloys, powders and thin films

50kV X-ray tube for wide elemental range

Semiconductor detector for superior precision and detection limits

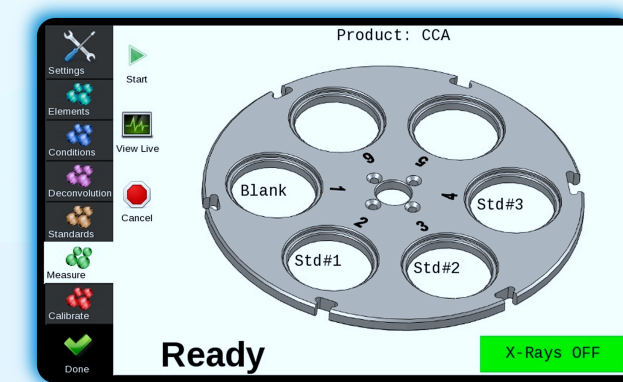
Multiple automated tube filters for enhanced sensitivity and selectivity

Modern smartphone style "icon driven" touch screen user interface

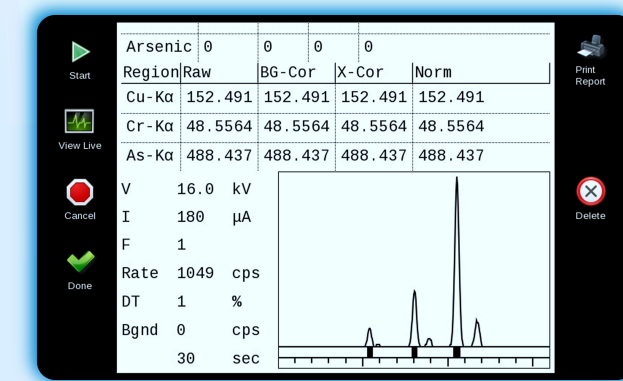
Convenient built in thermal printer

Low total cost of ownership with superior performance-to-price ratio

Optional fundamental parameters for either standardless analysis or reducing the minimum number of standards required for a calibration



Routine analysis of unknown samples is both easy and straight forward. For autosampler equipped systems, simply slide open the sample chamber door, load your samples. Then use the touch screen interface to enter sample names and select the analysis method.



From the simple results screen (as shown on the instrument display), the user can easily use a finger to scroll down to view the results detail - including the acquired spectra associated with the unknown sample. In addition to the usual elemental concentrations, this detailed information may be also be printed on the built-in thermal printer.

