



mini XRD

(X-RAY DIFFRACTOMETER)



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Analytical Technologies Limited

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>> Technical Data:

mini XRD is multifunction x-ray diffractometer using high frequency and high voltage technology, it's only miniaturization desktop x-ray analysis instrument.

By now, using x-ray diffraction theory determine the crystalline structure, Lattice constant & Phase analysis. X-ray diffractometer extensively is used by Industry, Agriculture, National defense, Pharmacy, Minerals, Food Safety, Petroleum, Education and research development and so on.

>> Operational condition:

Working temperature : 10~30°C;Relative humidity(RH) : 30%~70%;

Power supply: single phase AC220V±10%、50Hz±1;

Power capacity : > 600W;

>> Technical parameters :

Name	Items	mini XRD
X-ray tube	Туре	Tube voltage 60kV(target arbitrary choice Cu. Fe. Co. Cr. Mo)
	Focus size	1×10mm ²
	Maximum output power	2.0kW
	Cooling mode	Water cooling
X-ray Generator	Control mode	Tablet computer automatic Kv/ step,1mA/step
	Maximum output power	600W
	X-ray tube voltage	5-30kV
	X-ray tube current	2-20mA
	Stability	Less than 0.001% (power supply voltage fluctuation)
	Alarm device	Over Kv. Kv lower. Over mA. mA lower. No water. machine over-current. X-ray tube over-temperature. Xray tube power protection etc.
	Structure	vertical(theta-2theta)



Goniometer	Goniometer scanning radius	150mm
	ScanningRange	0°~160°(2theta)
	Scanning Speed	0.06°-76.2°/min
	Scanning Mode	theta-2theta linkage, continuous or step scanning
	Minimum Step Angle	0.001°
	Measuring Accruacy	Less than0.01°
	Angle Positioning Speed	120°/min
	2theta Repeatability Accruacy	Less than0.001°
	Slit Mode	Variable slit
Recording Control Unit	counter	Proportional (PC)
	Maximum linear Count Rate	5×10 ⁶ CPS
	Spectrum Resolution (Cu. kα Spectrum linear)	Less than25%(PC)
	Counter High Voltage	0-2100V
	Counter Mode	PLC automatic control,automatic PHA, dead time correction
	Stability	Better than ±0.01%
	X-Ray Leakage	Less than0.2 μSv/h
Aggregative indicator	Safety Indicators	Protection system for double protective, have a big and a small shield, to ensure the safety of the users
	Integrated Stability	Less than 0.5%
	Overall Dimensions	740×606×631mm

▶ mini XRD constitute as follow :

- X-ray tube.
- High Frequency X-ray Power.
- Control Unit.
- Goniometer.
- X-Ray Detector.
- X-Ray Protection.
- Computer System.

Present commonly used Cu, Co, Mo, Fe, Cr, W and Ag, the standard is Cu. 1

Regulatory compliances



>> Corporate Social Responsibility



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