

# XRD Diffractometer

## LXRD-A10



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XRD Diffractometer LXRD-A10 contains tube current up to 5 to 80 mA with a dimension  $1 \times 10 \text{ mm}$ /  $0.4 \times 14 \text{ mm}$ /  $2 \times 12 \text{ mm}$  and are designed for quality diffraction data, combined with ease of use and flexibility to quickly switch to different applications, This multi-purpose diffractometers are all equipped with X-ray tube of glass tube, ceramic tube, ripple ceramic tube with many different X-ray source materials (Cu, Fe, Co, Cr and Mo) and is coupled with an auto-switching dual wavelength optic. It have Low maintenance, high performance system and designed with Horizontal Goniometer structure and proportional/Scintillation counters detector

### Features

- Equipped with X-ray tube of glass tube, ceramic tube, ripple ceramic tube with many different X-ray source materials (Cu, Fe, Co, Cr and Mo)
- Coupled with an auto-switching dual wavelength optic
- Horizontal Goniometer structure
- Proportional/Scintillation counters detector
- For testing unknown samples it has phase identification and phase analysis for known mixed samples
- Crystal structure varies with temperature (high temperature vice versa) factor and chemical information tested by X-ray diffraction test device
- Equipped with programmable operation, integrated structure design with easy operation and well-designed outlook
- High throughput with high accuracy diffraction angle measurement
- Scanning range and Scanning speed are well design in equipment

### Applications

Best suited for the research and industrial product analysis with perfect combination of conventional analysis crucial measurement product and for academics and researchers in different application areas.

## Specification

Model No.	LXRD-A10
X-ray Tube	Glass tube, Ceramic tube, Ripple Ceramic tube: Cu, Fe,
	Co, Cr, Mo etc., Power 2 kW
Focus Size	1 × 10 mm/ 0.4 × 14 mm/ 2 × 12 mm
Stability	≤ 0.01 %
Tube Current	5 to 80 mA
Tube Voltage	10 to 60 kV
Rated Power	3 kW
Goniometer Structure	Horizontal (Ø to 2 Ø )
Radius of Diffraction	185 mm
Scanning Range	0 to 164
Scanning Speed	0.0012° to 70 ° min
Maximum Resolving Speed	100 ° / min
Scanning Mode	Ø to 2 Ø linkage, Ø, 2 Ø single action;
	continuous/steppingscanning
Angle Repeatable Accuracy	1 / 1000 °
Minimal Stepping Angle	1 / 1000 °
Detector	Proportional/Scintillation counters
Maximum Counting rate of Linearity	5 × 10 <sup>5</sup> CPS (with the compensate function of dropout
	counting)



Energy Resolution Ratio	$\leq 25\%$ (PC), $\leq 50\%$ (SC)
Counting Fashion	Differential Coefficient / integral, PHA automatically,
	Dead time regulate
Stability of System measure	$\leq 0.01\%$
Scattered Rays Dose	$\leq 1\ \mu\text{Sv/h}$ (without X-ray protective device)
Instrument Integrative Stability	$\leq 0.5\%$
Dimension	1100 × 850 × 1750 mm
Weight	About 25 kg