

Rigaku R-Axis Spider

The Rigaku R-Axis Spider is equipped with an image plate area detector which enables the use of microgram sample sizes due to the higher sensitivity of detection when compared to a CCD detector. In addition, the X-ray beam is collimated, allowing the beam to be adjusted to match a specific sample. Another feature of the R-Axis spider is the use of a $\frac{1}{4}$ χ goniometer which can be oscillated in ω , χ , and ϕ to produce powder patterns with minimized preferred orientation and provides a more accurate identification of a crystalline phase. The R-Axis Spider is equipped with an Oxford Instruments Cryostream Plus capable of temperatures in the range of 80 – 500 K and is ideal for solid-state phase transitions and decomposition studies.

- Image plate area detector
- Cu K α source
- Powder patterns can be obtained on μg sized samples
- Variable temperature capabilities (80 – 500 K)
- Oscillation of samples in ω , χ , and ϕ creates diffraction patterns with minimized preferred orientation
- Variable beam spot size (0.3, 0.5, and 0.8 mm)