

XtaLAB  
**Synergy** **i**

Single crystal X-ray diffractometer

A cutting-edge instrument for all your crystallography needs



**Rigaku**

POWERING NEW PERSPECTIVES

A cutting-edge instrument for all your crystallography needs

Whether you select a dual source micro-focus configuration or a single source micro-focus configuration, the XtaLAB Synergy-i provides the latest technology, from the sources to the detector.

- The latest HPC detector for true digital photon counting.
- Both dual and single source configurations with micro-focus technology as standard.
- Kappa goniometer ensures publication standards are met, even for low symmetry samples.



### Unique benefits of the XtaLAB Synergy-i

- The scintillator-free hybrid photon counting (HPC) detector has been designed by Rigaku to ensure cutting-edge performance with true digital photon counting technology for unparalleled sensitivity.
- The micro-focus PhotonJet-i sources (Cu/Mo), available in dual or single source configurations, have low power consumption, yet provide high flux in order to study a variety of sample types.
- The 4-circle kappa goniometer ensures that the most efficient data coverage is achieved even for the lowest symmetry P1 samples whether Cu or Mo radiation is used.

### WHICH WAVELENGTH IS BEST FOR YOUR SAMPLE?

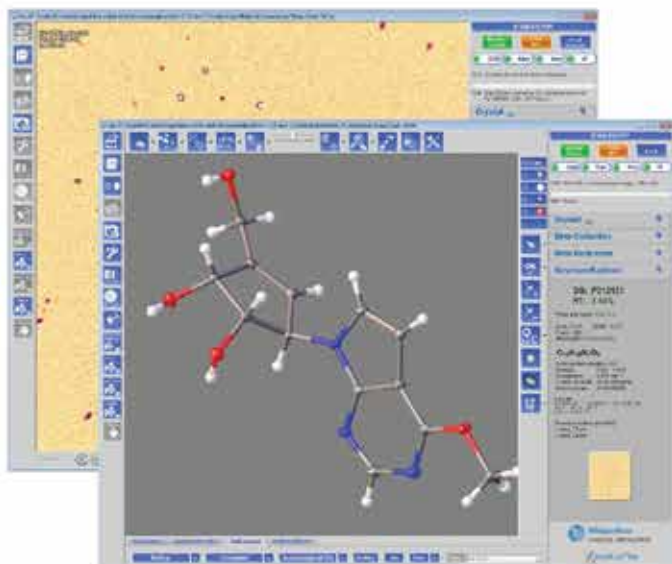
Sample type	Mo	Cu
Purely inorganic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Organometallic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Organic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Absolute structure (organics)		<input checked="" type="checkbox"/>
Twinning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Charge density	<input checked="" type="checkbox"/>	
Incommensurates	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Highly absorbing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Preferred radiation choice

### ADDITIONAL FEATURES

- The XtaLAB Synergy-i is compatible with most low temperature devices including the SmartStream, Cryostream 700, 800, 800+ and Cobra.
- Future upgrade options for the system include the HyPix-6000HE detector and a high pressure kit.
- Converting your XtaLAB Synergy-i from a single source to a dual source instrument is also an option.

## USER-INSPIRED SOFTWARE



**CRYALIS**<sup>PRO</sup>

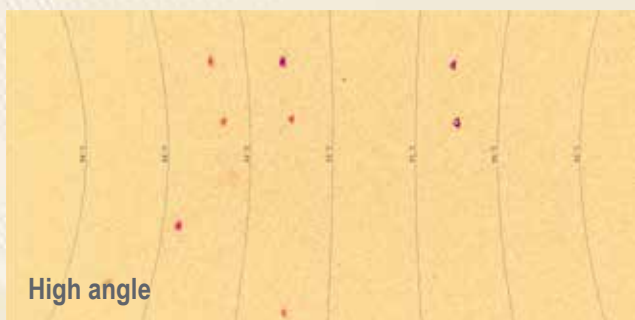
The XtaLAB Synergy-i is controlled by CrysAlis<sup>Pro</sup>, a user-inspired software program designed and produced specifically for single crystal X-ray diffraction. CrysAlis<sup>Pro</sup> will guide you towards getting the best possible data from your unique sample.

The XtaLAB Synergy-i platform comes standard with AutoChem. This powerful automated structural solution and refinement package provides visual structural feedback during your data collection. AutoChem will quickly give you an idea of how the data collection is progressing and upon completion make sure the best structural solution is available.

Our integrated structure solution and refinement program, StructureExplorer, allows for further manipulation and refinements of your structure and contains a direct link between the final data reduction files and the final structure solution files. The pre-publication 'Checklist' and a CheckCIF link provides quick information about how ready your crystal structure is for publication.

## PUBLICATION QUALITY RESULTS

The powerful XtaLAB Synergy-i diffractometer, controlled by the highly-regarded CrysAlis<sup>Pro</sup> software package, makes it simple to obtain high-quality, publishable data that speaks for itself.



Formula	$C_{15}H_{22}ClNO_2$
Space group	Monoclinic C2/c
Completeness	99.9%
$\langle I/\sigma \rangle$	28.28
$R_1 / R_{int}$ (%)	3.27, 2.19



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[www.rigaku.com/products/crystallography](http://www.rigaku.com/products/crystallography)



[www.rigakuxrayforum.com](http://www.rigakuxrayforum.com)

Find useful resources and draw on the combined expertise of Rigaku experts and a community of over 2500 Rigaku Oxford Diffraction users from around the world.

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