

I03 – Macromolecular Crystallography

I03 – Macromolecular Crystallography. Technical documentation migrated from Magnolia (/Instruments/Mx/I03.html).

This is an added sentence.

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Overview

I03 is a highly automated beamline for macromolecular crystallography, supporting rapid data collection from protein crystals at cryogenic temperatures. It is optimised for high-throughput screening and for challenging targets such as membrane proteins.

Tobi

Timi



The I03 experimental hutch (demo image)

Documents

[📄 I03 Beamline User Guide \(PDF\)](#)

Data collection

Diffraction from a crystal lattice obeys Bragg's law $n\lambda = 2d\sin\theta$, where d is the lattice spacing. The accessible resolution depends on the X-ray wavelength and detector distance.

Parameter	Value (demo)
Energy range	5-25 keV
Beam size	Variable, micro-focus available
Detector	Hybrid pixel array

Before your visit

Safety induction for visiting users

All visiting users must complete the online safety induction before arriving at Diamond. The induction covers radiation safety, the experimental hall rules and what to do in an emergency.

- Complete the induction in the User Administration System (UAS) at least 48 hours before your visit.
- Bring photo ID; your site pass is issued at reception.
- Read the [experimental hall safety rules](#) and your beamline's local rules.

Accessing your data after your visit

Data collected at Diamond is stored centrally and can be accessed remotely after your visit using your FedID. Raw data is retained in line with the [Scientific Data Policy](#).

Automated processing pipelines run during your experiment; results appear alongside raw data within minutes.