

# **metaljet**

High-end data collection system

**excillum** MetalJet D2+ 250W

**DECTRIS** EIGER2 R 4M or PILATUS3 R 1M

**mar<sup>dtb</sup>** goniostat



# **metaljet** High-End Data Collection System

The MetalJet technology invented by Excillum replaces the traditional solid anode of X-ray generators with a jet of liquid metal. Thereby the achievable power-level is no longer limited by when the anode melts. It's already molten! With the MetalJet D2+ X-ray source you can put up to 250W into a focal spot of size 5-20  $\mu\text{m}$  on the anode and achieve a brilliance that is only beaten by modern synchrotron beamlines.

The EIGER2 R 4M or PILATUS3 R 1M hybrid photon counting detectors mounted on a **mar dtb** goniostat make a perfect match for the ultimate high-end data collection system for in-house use. You are looking at the most advanced data collection system that can be used for many X-ray applications be it single crystal crystallography of proteins and small molecules, powder diffraction, texture analysis or small angle scattering. The large detection surfaces of the EIGER2 4M or PILATUS3 1M detectors allow for collecting highly redundant data up to atomic resolution of 1.0  $\text{\AA}$ .



## SPECIFICATIONS

X-ray sources:	<ul style="list-style-type: none"><li>• MetalJet D2+ 70kV, 250W, Ga-rich alloy for photons with 9.2 keV (1.348 <math>\text{\AA}</math>)</li><li>• MetalJet C2, 70kV, 250W, entry-level without electron optics</li></ul>
Detectors:	<ul style="list-style-type: none"><li>• Dectris EIGER2 R 4M detector, continuous read-out with 0 <math>\mu\text{s}</math>ec dead time, up to 5 frames/second, 155 x 162 mm active area, 75 <math>\mu\text{m}</math> pixel size, 2 x 4 modules</li><li>• Dectris PILATUS3 R 1M detector, 7 msec read-out time, up to 5 frames/second, 169 x 179 mm active area, 172 <math>\mu\text{m}</math> pixel size, 2 x 5 modules</li></ul>
Goniostat:	<b>mar dtb</b> 2-axis multi-purpose goniostat with automatic X-ray beam alignment and continuous monitoring of the primary beam intensity, distance translation stage from 40 to 390 mm, 2-theta stage from 0° to 30°.
Options:	<ul style="list-style-type: none"><li>• Built-in motorized goniometer head or <b>easymount</b> extension for <b>mar dtb</b></li><li>• <b>marxps</b> crystallization plate scanner extension for <b>mar dtb</b></li><li>• Experimental table and radiation enclosure</li></ul>