

mar4M

DECTRIS EIGER2 R 4M
on **mar^{dtb}** goniostat



mar4M Ultra Fast Data Collection System

You love it at synchrotrons and now you can have it at home, too. The EIGER2 R 4M hybrid photon counting detector mounted on a **mar_{dtb}** goniostat makes the perfect choice for a world class ultra fast data collection system highly suitable for in-house use. For a true alternative to a synchrotron, combine it with an Excillum MetalJet X-ray source, and 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. Of course, the **mar4M** will also fit any other rotating anode or sealed-tube micro-focus generator based system like the **mar_μX^{3G}**.

Thanks to the large detection surface of 155 x 162 mm the EIGER2 R 4M detector is capable of collecting highly redundant data without 2-theta offsets up to a resolution of 1.4 Å (CuK α). If you need an even larger solid angle, the built-in 2-theta arm of the **mar_{dtb}** goniostat with a range of 30° extends the solid angle to 100° in 2-theta at a minimum distance of approx. 35 mm. The small pixel size of only 75 μ m gives you perfect separation of spots even at small distances or with very large unit cells.



SPECIFICATIONS

Detector:	Dectris EIGER2 R 4M Hybrid Photon Counting detector, continuous read-out with 0 μ sec dead time, up to 20 frames/second, 155 x 162 mm active area, 75 μ m pixel size, 2 x 4 modules
Goniostat:	mar_{dtb} 2-axis multi-purpose goniostat with automatic X-ray beam alignment and continuous monitoring of the primary beam intensity, distance translation stage from 35 to 390 mm, 2-theta stage from 0° to 30°
Options:	<ul style="list-style-type: none">• Built-in motorized goniometer head or easymount extension for mar_{dtb}• Complete metaljet data collection system with Excillum MetalJet D2+ source, cryo-cooler, marLiN₂ LN₂ refill system, experimental table and enclosure• mar_μX^{3G} microfocus generator instead of Excillum MetalJet