

mar4M

Dectris EIGER R 4M Detector
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 EIGER 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^{2G}**.

Thanks to the large detection surface of 155 x 163 mm the EIGER 4M detector is capable of collecting highly redundant data without 2-theta offsets up to a resolution of 1.4 Å. 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. 30 mm. The small pixel size of only 75 μm gives you perfect separation of spots even at small distances or with very large unit cells.



SPECIFICATIONS

Detector:	Dectris EIGER R 4M Hybrid Photon Counting detector, 4 msec read-out time, up to 5 frames/second, 155.2 x 162.5 mm active area, 75 μm pixel size, 2 x 4 modules, water-cooled
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 48 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 mar^μX^{2G} microfocus X-ray generator and data collection system with cryo-cooler, experimental table and enclosure• Excillum MetalJet X-ray source instead of microfocus generator