

mar μ *X*^{3G}

Next generation
turn-key system
for X-ray crystallography



mar μ X^{3G} - Next generation turn-key system

mar μ X^{3G} is the next generation of our complete turn-key system for X-ray crystallography. It delivers twice as many usable X-ray photons as compared to the previous generation and narrows the gap to modern rotating anodes. **mar μ X^{3G}** consists of the **mar μ X** micro-beam X-ray generator operating at 50 Watts. It is equipped with a state-of-the-art multi-layer optic producing a superbly shaped beam with focal point near the sample. The system can be equipped with a fast **mar345 \mathcal{S}** image-plate based detector or - even better - the lab versions of PILATUS or EIGER2 detectors by Dectris. They all fit on the well known **mar μ dtb** goniostat. The system comes complete with a cryo-cooler, an automatic refill system and a functional and stable table with plenty of space for all electronics and attachments.



SPECIFICATIONS

X-ray source:	marμX^{3G} micro-beam 50 kV / 1 mA (Primux 50 by Anton Paar, Austria) with a 15 cm long AXO multi-layer optic and a closed circuit water cooling unit.
Detector:	mar345\mathcal{S} fast image plate detector, 9 to 58 seconds read-out time depending on scan mode and diameter. Options: EIGER2 R 1M, EIGER2 R 4M, PILATUS3 R 1M, PILATUS3 R 300K
Goniometer:	marμdtb 2-axis multi-purpose goniostat with automatic X-ray beam alignment and continuous monitoring of the primary beam intensity Options: built-in motorized goniometer head, easymount goniostat
Cryo-cooler:	Oxford Cryostream 1000 liquid nitrogen system with mar LiN₂ auto-refill system
Experimental table:	Stainless steel magnetic table top and aluminum table frame 1700 mm x 1000 mm x 800 (w:d:h) Options: radiation enclosure with sliding doors and shutter interlock system