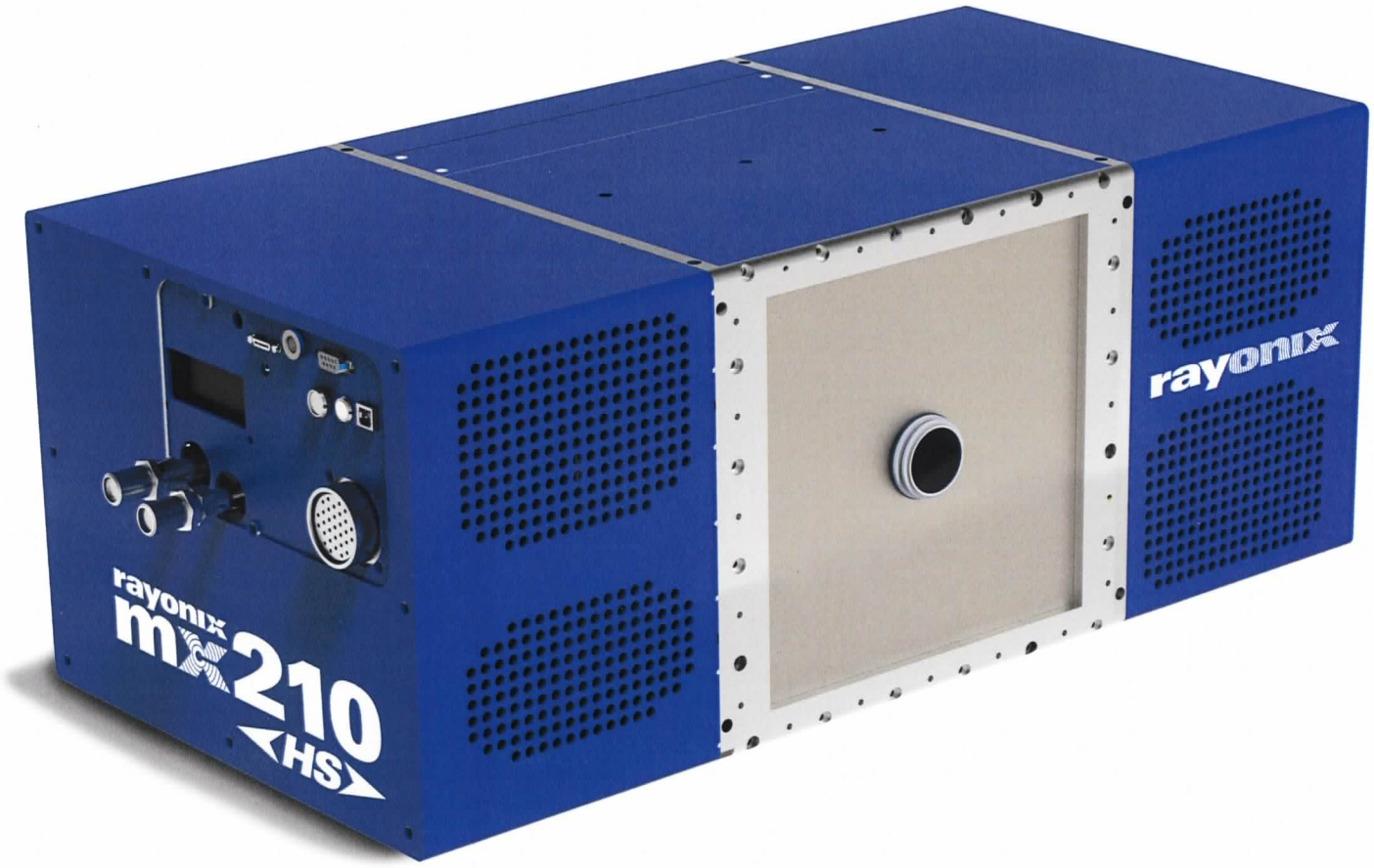
rayonix mx210 HS

Large area WAXS X-ray detector designed for simultaneous SAXS/WAXS

- Vacuum tunnel through center of imaging area
- Tunnel expands to allow all SAXS to pass through
- Frame-transfer technology for high speed X-ray data collection without compromising resolution or data quality
- No gaps in imaging area



rayonix
High-performance X-ray technology

rayonix MX210-HS

In order to allow SAXS to pass through while measuring WAXS, scientists have been asking for an X-ray detector with a hole in the middle. The vacuum tunnel through the center of the MX210-HS connects to your evacuated flight path with built-in flanges.

User-Configurable Imaging Parameters

On-Chip Binning	frames/sec	pixel size in micron
1×1	2.5	55
2×2 *(standard)*	10	109
3×3	20	164
4×4	33	219
5×5	47	273
6×6	62	328
8×8	92	438
10×10	123	547
Noise	High Speed mode: 8 e^-/pixel	Low Noise mode: 4.5 e^-/pixel

*Rayonix **MX210-HS**, showing the vacuum tunnel exit.*

Technical Specifications

FT-CCDs bonded to Fiber-Optic Tapers		**4 Modules** **15 Megapixels**
Sensors		Proprietary Rayonix Frame-Transfer CCD
Active Imaging Surface		210 mm×210 mm
Readout Electronics 16 channels per FT-CCD		64 channels
Dead Time		1 millisecond
Full Well Capacity *(standard 2×2 binning)*		360k e^-/pixel
Dark Current		0.003 e^-/pixel/second or 0.0007 photons/pixel/second (12keV)
Electro-Optical Gain		4.5e^-/12keV photon
Standard Phosphor		40 micron thick, many custom options available
PSF, FWHM		100µm with 40µm thick phosphor
Sensor Operating Temperature		–80° C
Fiber-Optic Taper Demagnification Ratio		3.6:1
Cooling		Closed-cycle refrigeration
Physical Dimensions:		
Detector Head	Height × Width × Depth	254 cm×634 cm×445 cm
	Approximate Weight	50 kg
Electronics/Cooling Assembly	Height × Width × Depth	175 cm×64 cm×64 cm
	Approximate Weight	215 kg
Real-time data collection, correction and storage; high volume data storage solutions also available.		

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