

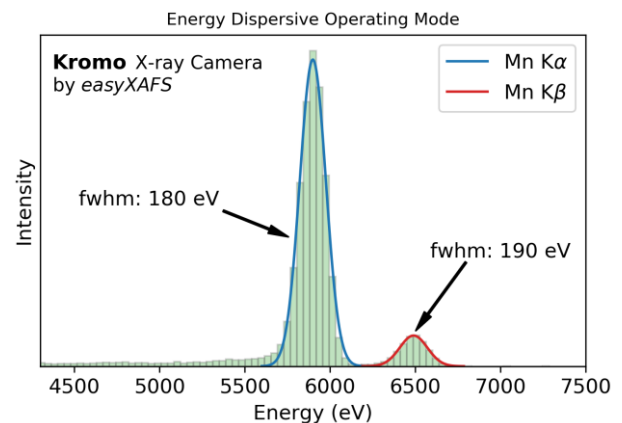
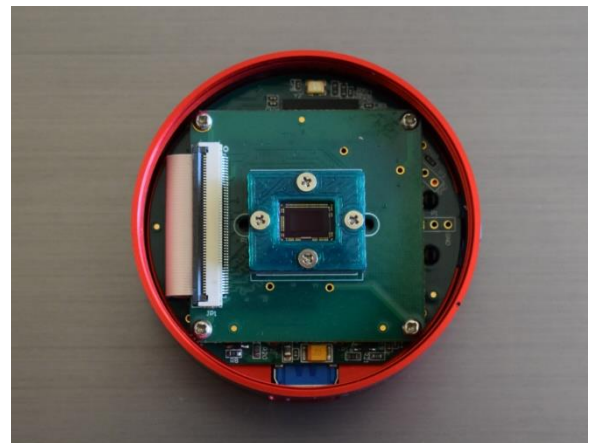


## THE *kromo-TX1*™ COLOR TENDER X-RAY CAMERA

The *kromo-TX1*™ is an inexpensive ‘color’ x-ray camera for 2-7 keV operations, with real-time determination of the energy and location of each single-photon event. The mass-produced CMOS sensor requires no special cooling and is easily replaced if damaged. With saturation rates around 1,000,000/s and energy resolution of 200eV at 3keV, the *kromo-TX1*™ can also be used as a simple energy-dispersive detector.

### PRODUCT SPECIFICATIONS

Pixel size	2.9 x 2.9 $\mu\text{m}$
Sensor resolution	1936 x 1096 pixels
Frame rate	Up to 120 fps
Energy range	2-7 keV
Energy resolution	200 eV @ 3 keV
Saturation rate	~1,000,000/s
Quantum efficiency	~50% at 2.3 keV (S K $\alpha$ ) ~25% at 4.5 keV (Ti K $\alpha$ ) ~10% at 6.4 keV (Fe K $\alpha$ )
Dark noise	None above 200 eV
Case Dimensions	62 mm diameter x 36 mm length
Weight	120 grams
Interface	USB 3.0



#### **Application:** *Dispersive X-ray Spectrometer*

The image to the right shows a *kromo-TX1*™ exposure in a fully-dispersive benchtop spectrometer for sulfur speciation studies, the *easyXAFS BRIMSTONE*™. For that exposure, a narrow energy acceptance band was set around the S K $\alpha$  energy so as to reject lower-energy fluorescence or stray scattering from the higher-energy photons from the x-ray tube.

