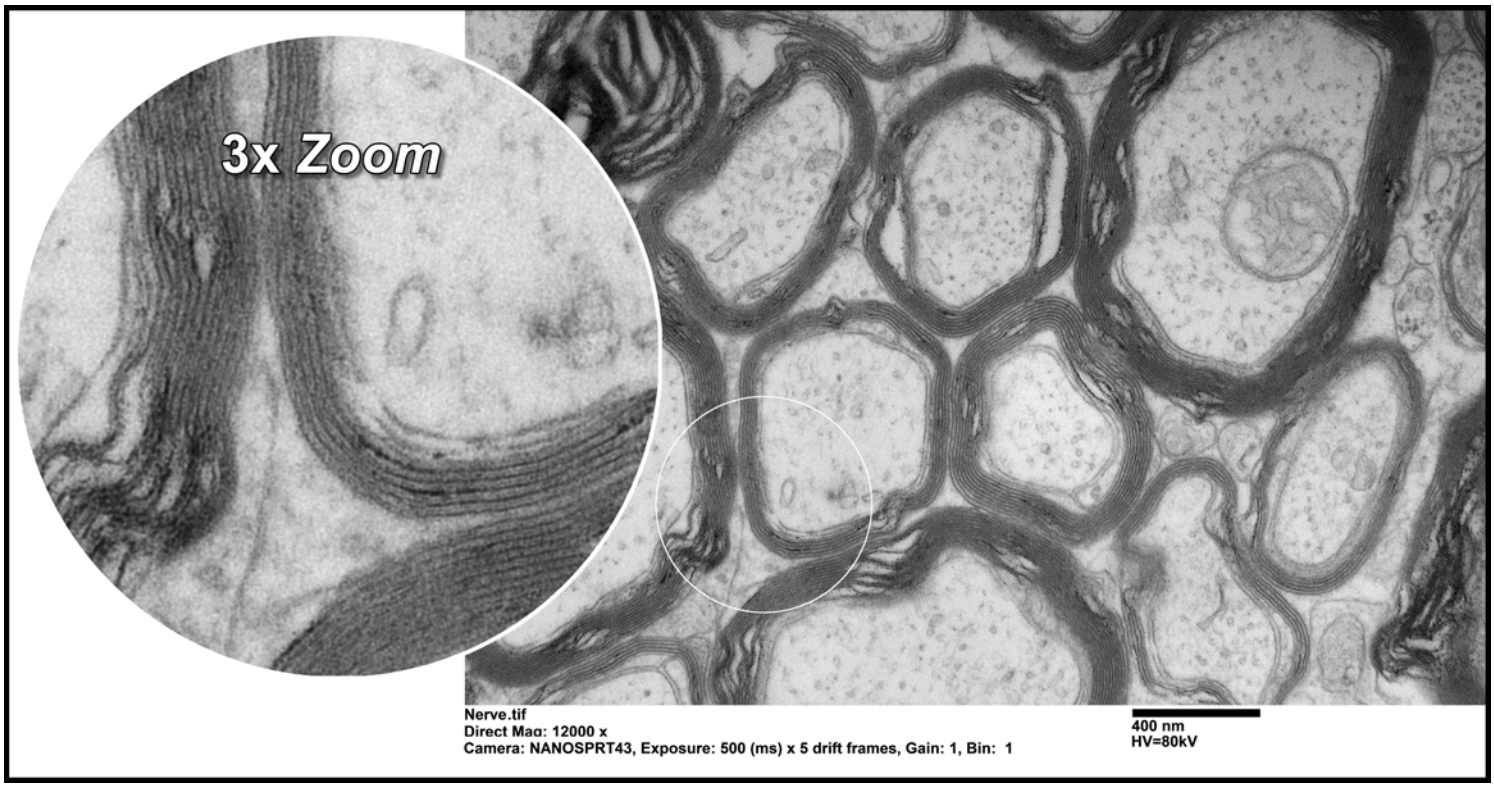
NanoSprint 43
Ultra High Resolution CMOS TEM Camera



Introducing the NanoSprint43 :

The NanoSprint43 is AMT's newest product featuring an entirely new sensor that achieves the high sensitivity required for TEM clinical applications and life-sciences. Its fine-pixel, low-noise CMOS sensor offers an ultra large 43 megapixel sampling region with a high speed readout.

AMT coupled the sensor's generous field-of-view and ultra-fine sampling with AMT's high performance optics to create a system that is ideal for a wide range of applications. Users can enjoy both its excellent contrast plus the ability to zoom for images that contain both context and detail.

NanoSprint 43 Specifications	
Sensor Size [pixels]	7915 × 5436
Phosphor Pixel Size [µm]	5.5
Active Pickup Region [mm]	43 x 30
Digitization	≥ 16 bits with frame accumulation
Mounting Position	on-axis
HT Range [kV]	20–200
Optical Coupling	AMT custom high MTF B lens
Lens Magnification	0.5
Lens NA $_{image}$	0.22
Lens MTF at Nyquist [%]	> 40
Framerate for Display Image [fps]	10
Cooling	20º C water
Micro Lenses for High Fill Factor	Yes
Shutter	Global
Single Frame Exposure [ms]	0.1 - 1000
Power	100-240VAC
Digital Interface	Camera Link
Vacuum Compatibility	$< 10^{-7}$ torr
Vacuum Seals	Fixed O-ring
Environment	Electronics and cooling outside of vacuum
X-ray shielding limit	Up to 200kV
Certifications	UL, CE, RoHS
Computer OS	Windows 7/10 Professional 64 bit