BioSprint12
High Definition CCD Camera for TEM

- 12 Megapixel Scientific CCD
- High Speed Readout
- Anti-Blooming sensor
- High Performance Lens

AMT’s BioSprint12 camera system creates large 12 megapixel images that challenge film in definition. This system achieves high sensitivity and resolution by employing the use of AMT’s highly corrected B-lens. The BioSprint12 is available in most TEM mounting configurations with the Mid-mount position being the most popular. This camera system is an excellent choice for clinical pathology and other applications requiring magnifications lower than 50kx; yet it is also capable of lattice imaging at high magnifications. The BioSprint12 system delivers enough information that users may digitally enlarge their images without the worry of pixelation. This saves on both imaging and analysis time.

High Definition Biological Imaging:
Sensor, Camera Head, and Phosphor:
1) Scientific grade, progressive scan (KAI-16050) sensor
2) 4000 x 3200 pixels with 10.8 μm square pixels at the phosphor

Lens:
AMT’s B Lens: Combines extraordinary speed with high resolution. This lens maintains a >50% MTF @100 line-pairs/mm across the entire image to provide unmatched sharpness at its large aperture. With an NA of 0.23 @image B lens systems have extremely high sensitivity. The B lens has <1% distortion across the field.

Digital Interface and Electronics:
High speed Camera Link digital interface for data transfer and control. Electronic Shutter with no beam blanking or mechanical shutter required with exposures adjustable from 1ms to >60s

BioSprint12 Camera Configurations:

BioSprint12-M-B Extra-Wide Angle Mid-Mount
With 50% photographic or greater field-of-view imaging with up to a 43.1x34.5 mm phosphor.

BioSprint12-L-B Wide Angle Low-Mount
With film compatibility and ~40% photographic or greater field-of-view imaging with up to a 43.1x34.5 mm phosphor.

BioSprint12-S-B Super-Wide Angle Side-Mount
With >100% photographic or greater field-of-view imaging with up to a 43.1x34.5 mm phosphor (TEM dependent)

Readout Rate:
Multi-speed readout with 80 MHz maximum at 16 bits using frame summation of the ADC

Maximum viewing speed:
25 fps with 4x4 binning at full field