

Selection/Satisfaction/Service = The AMT Advantage

XR-80 TEM Camera Series

***Large 8 Megapixel Scientific CCD Sensor
80 MHz High Speed, Low Noise Readout
Camera Link Interface
High Performance Lenses***



Standard XR80 Camera Configurations

XR-80S-B

Classic Wide Angle Side-Mount

- 1) >100% photographic or greater field-of-view imaging with up to a 26x36 mm phosphor (TEM dependent)
- 2) 11 μm square pixels at phosphor.
- 3) Uses AMT's high performance B-lens.
- 4) Film compatible.

XR-80M-B

Wide-Angle Multi-Discipline Mid-Mount

- 1) 50% photographic or greater field-of-view imaging with up to a 26x36 mm phosphor.
- 2) 11 μm square pixels at phosphor depending on lens option.
- 3) Uses AMT's high performance B-lens.

XR-80M-C

Super Wide-Angle Mid-Mount

- 1) ~100% photographic or greater field-of-view imaging with up to a 52x72 mm phosphor.
- 2) 22 μm square pixels at phosphor depending on lens option.
- 3) Uses AMT's high performance, large format C-lens.

XR-80L-B

High Mag Low-Mount

- 1) ~40% photographic field-of-view imaging with 26x36 mm phosphor.
- 2) 11 μm square pixels at phosphor.
- 3) Uses AMT's high performance B-lens.
- 4) Film compatible.

XR-80L-C

Wide-Angle Biological Low-Mount

- 1) ~75% photographic field-of-view imaging with a large 52x72 mm phosphor.
- 2) Large 22 μm square pixels at phosphor.
- 3) Uses AMT's high performance, large format C-lens.
- 4) Film compatible.

Advanced Microscopy Techniques 242 West Cummings Park, Woburn, MA 01801

Tel: (978) 774-5550 Fax: (978) 739-4313

Email: info@amtimaging.com URL: <http://www.amtimaging.com>

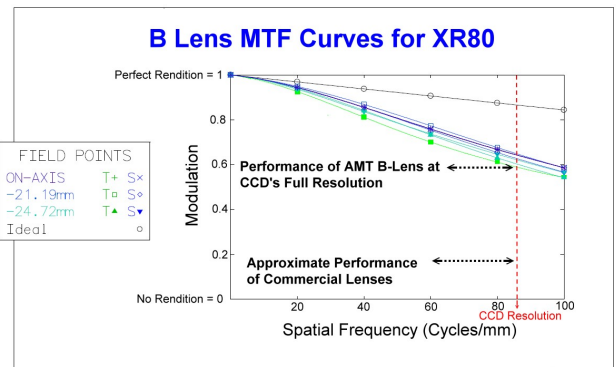
XR80 Combo4 Rev 4



Selection/Satisfaction/Service = The AMT Advantage

Finite Conjugate Lens Options For XR-80 Series

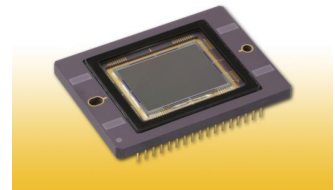
AMT B Lens: Combines extraordinary speed with high resolution. This lens maintains a >50% MTF @100 line-pairs/mm across the entire image to provide unmatched sharpness at its numerical aperture of 0.23 @image). This low f-number gives B lens systems extremely high sensitivity. The B lens has <1% distortion across the field.



AMT C Lens: This is a sharp 4:1 lens (0.25x magnification) that is also very fast, with a numerical aperture of 0.40 @image). This lens maintains a >60% MTF @100 line-pairs/mm across the entire image of large phosphor screens needed for high definition, biological imaging. It is used at its maximum aperture to achieve low magnification factor bottom mount imaging. The C lens has <1% distortion across the field.

XR-80 Camera Properties

Sensor: Scientific grade, CCD sensor with 3296 x 2472 x 5.5 μm pixels with 13x18 mm active area.

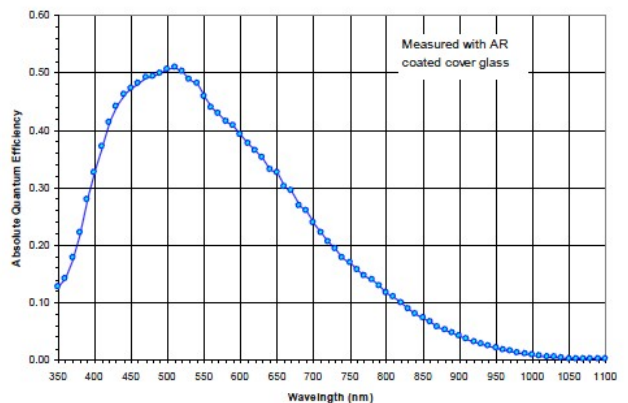


Shutter: Electronic Shutter with no beam blanking or mechanical shutter required with exposures adjustable from 1 ms to 60 min.

Digital Interface and Electronics: High speed camera interface for both data transfer and control. All electrical components are outside the TEM vacuum for reliability and maintenance.

Camera Link digital

Readout Rate: 80MHz single port readout. Raw data acquired at 12 bits resolution with recording to 16 bits with multi-frame summations of ADC output.



Maximum viewing speeds:

- Full field/1x1 binning (i.e. full resolution): 8 fps
- Full field/2x2 binning: 10 fps
- Full field/4x4 binning: 20 fps
- Half field/1x1 binning) 10 fps

Advanced Microscopy Techniques 242 West Cummings Park, Woburn, MA 01801

Tel: (978) 774-5550 Fax: (978) 739-4313

Email: info@amtimaging.com URL: <http://www.amtimaging.com>

