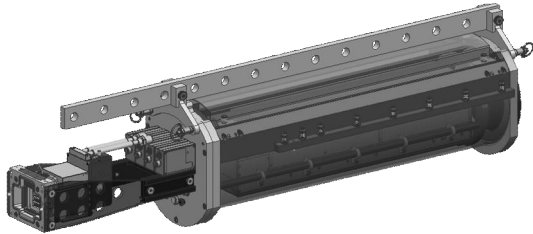


Sydor X-ray Framing Camera (XRFC) System



The Sydor XRFC System is a complete integrated solution for your x-ray imaging needs. The XRFC is designed for use in vacuum to provide 2D spatially time-resolved frames or 1D spectrally resolved images of target features. The system uses a strip-line activated micro channel plate and phosphor screen coupled to a vacuum CCD camera. The spectral sensitivity is from 200nm to 15keV. The system can be configured with fast or slow detection heads for frames ranging from 40 picoseconds (ps) to 1000ps in duration.

SYDOR X-RAY FRAMING CAMERA	KEY PERFORMANCE PARAMETERS
DETECTOR HEAD	
Micro Channel Plate (MCP)	1, 2, or 4 strip
Phosphor Screen	55mm Round Fiber Optic with P-11 phosphor (other phosphor types available)
Head Speed	Fast option ~40ps – 100ps, Slow option 200ps to 1000ps
Spectral Sensitivity	200nm to 15keV
ELECTRONICS	
Frame Speed – Fast option	40ps -100ps (one speed)
Frame Speed – Slow option	200-1000ps (any number of discrete speeds)
Trigger Input	Optical or Electrical
Bias voltage for a photo conductive detector (PCD)	-1kV to +1kV
DC or pulsed voltage for the phosphor screen	0kV to +5kV
Monitor output	PCD, channels 1-4, and pulsed phosphor signals
Power	28VDC at <1.2A
READOUT	
SYDOR Vacuum X-Ray CCD	Compact vacuum compatible digital detector (see separate data sheet)
Sensor	4096 x 4096, 9µm pixels (37mm x 37mm imaging area)
Thermoelectric Cooler	0°C in Vacuum
Communication	Fiber Communication through Vacuum
Controller	19" Rack Mount with Ethernet communication
Controls	Readout rate, arming/triggering, binning, and CCD temperature
XRFC AIR BUBBLE AND MOUNTING STRUCTURE	
Hermetically Sealed Air Enclosure	Keeps electronics from contaminating the vacuum or becoming contaminated
Mounting Rails	Positioning features for use in a Ten Inch Manipulator (TIM)
Mounting Points	Various Front-end nose cones and diagnostics
MECHANICAL	
Dimensions (without rails or lifting yoke)	38.5" long, 7.125" wide, 8.5" high
Weight	48 lbs
Lifting	Removable lifting handles and rigging yoke

Specifications subject to change at any time