



ROSS 8600 X-Ray Streak Camera

The ROSS Ultrafast X-Ray system delivers high-precision and accuracy enabling single secondary electron detection and world-class performance in the most demanding applications.

SYDOR ROSS 8600 (WITHOUT OCM):

KEY PERFORMANCE PARAMETERS

STREAK TUBE

Streak Tube	Photonis P860
Temporal resolution	<1 picosecond
Spatial resolution	20 lp/mm @ 50% contrast
Photocathode size (effective)	10 mm
Photocathode type (changeable)	Various foils and crystals available; consult Sydor for details
Accelerating electrode type	Slot
Spatial magnification	1.5
Screen phosphor	P43 on fiber optic window

ELECTRONICS

Sweep speeds	2 Speeds: 500ps, 2ns; other ranges available
Trigger input voltage level	TTL
Trigger input rise time	<10ns
Trigger jitter	<25 picoseconds rms
Hold-off time	25 milliseconds
Trigger input width	300ns <Trigger Width <1ms
Voltage stability	±0.02% Closed Loop (-15kV Cathode Supply) ±0.1% Closed Loop (High Voltage Supplies)

RECORDING SYSTEM

Recording System	SI-800 TE Cooled Camera with 1:1 Fiber Relay, E2V chip 2048 x 2048 pixels @ 13.5µm ²
Dark current	<0.1 electrons/pixel/second at -35°C
System noise	<5 electrons/pixel
Full well	90,000 electrons, unbinned

PHYSICAL DATA

Dimensions	9"W x 9"H x 38.8"L (vacuum chamber compatible [TIM])
Input voltage	+28 VDC, 5A
Shielding	Extensive mu-metal EMI shielding
Computer interface	Serial over optical fiber (MPX)

SOFTWARE

Software	ROSS_App
Compatible Computer OS	Windows 2000 or Windows XP
Functions, Features	Full control of streak camera, acquisition and display of streak image, image processing, file storage and file exportation (see software manual)

Specifications subject to change at any time

FOR MORE INFORMATION PLEASE CONTACT US AT: **(585)278-1168**

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