SYDOR INSTRUMENTS, LLC

PRODUCT SPECIFICATIONS

ROSS 8200 Streak Camera

The Sydor ROSS Streak Camera is exclusively designed to work with the Sydor ROSS Optical Calibration Module (OCM). Together with the OCM, the Sydor ROSS Streak Camera is capable of 1% measurement accuracy, remote operation, and auto-calibration for critical applications such as beam timing, temporal pulse shaping, and shock breakout studies/VISAR experiments.

SYDOR ROSS 8200 (WITHOUT OCM):	**KEY PERFORMANCE PARAMETERS**
STREAK TUBE	Photonis P820P
Temporal resolution	1 picosecond
Spatial resolution	20 lp/mm @ 50% contrast
Photocathode size (physical)	10mm
Photocathode type	S1 or S20 on sapphire or glass window
Accelerating electrode type	slot
Spatial magnification	1.5
Screen phosphor	P22N on fiber optic faceplate
ELECTRONICS	
Sweep speeds	4 standard speeds: 2ns, 6ns, 12ns, 30ns (configurable to any 4 speeds, 2ns min – 50ns max)
Trigger input voltage level	TTL
Trigger input rise time	<10ns
Trigger jitter	<70 picoseconds rms
Hold-off time (streak retrace)	25 milliseconds
Trigger input width	300ns <Tw < 1ms
Voltage stability	±0.02% closed loop (-15Kv cathode supply) ±0.1% closed loop (bias & sweep supplies)
RECORDING SYSTEM	SI-800 TE cooled camera with fiber relay, E2V chip 2048 x 2048 pixels @ 13.5um sq.
Dark current	<0.1 electrons/pixel/second at –35 deg C
System noise	<5 electrons per pixel
Full well	>= 90,000 electrons, 1x1 binned
PHYSICAL DATA	7"W x 12"H x 21"L (Sydor ROSS without OCM) 10"W x 12"H x 21"L (Sydor ROSS without OCM)
Input power	+28VDC power
Shielding	Extensive mu-metal EMI shielding
Computer interface	MTRJ fiber duplex or Serial RS232

Specifications subject to change at any time

FOR MORE INFORMATION PLEASE CONTACT US AT: **(585)427-9112**
3495 WINTON PLACE, BUILDING E · ROCHESTER, NY 14623 · SYDORINSTRUMENTS.COM · INFO@SYDORINSTRUMENTS.COM