



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

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|------------------|--|
| 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

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|--------------------|--|
| 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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