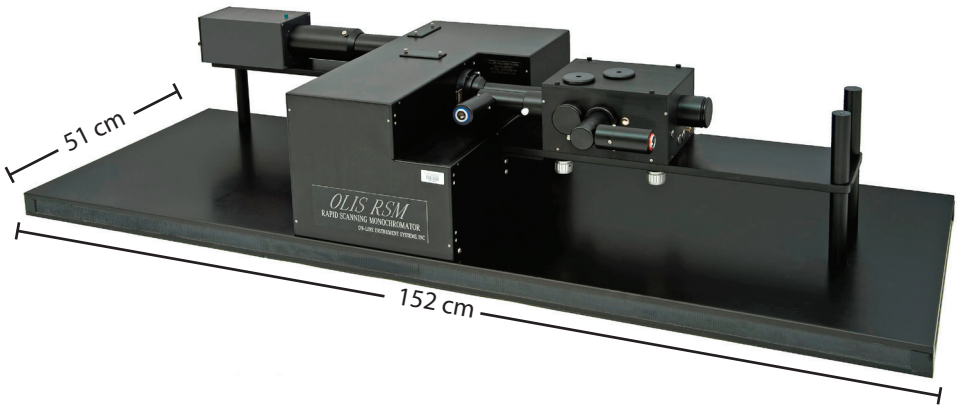
# OLIS RSM 1000

## Millisecond scanning with milliabsorbance sensitivity

Developed for stopped-flow spectroscopy, the "RSM 1000" identifies "Rapid-Scanning Monochromator" capturing "1000 scans/ second." The name used on the 1992 patent is "Subtractive Double Grating Monochromator with Moving Intermediate Slit." Every OLIS product with the numeral "1000" includes this singular performance: milliabsorbance sensitivity with millisecond scan rates. In addition, when used in single wavelength mode, the acquisition rate becomes 1000 points per 2 milliseconds, perfect for laser/ flash photolysis.




**Standard Aquisition Mode:**
**Absorbance**

**Enhancements Supported:**
CLARiTY
Circular Dichroism
Circularly Polarized Luminescence
Fluorescence
Phosphorescence Lifetime
Peltier Thermal Control
Stopped Flow
Thin Film Holder
Titrator

### OLIS RSM 1000 SPECIFICATIONS

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|---|---|
| Wavelength Range | 200 - 800 nm |
| Monochromator | Subtractive Double Grating with Moving Intermediate Slit; 50 mm x 50 mm halographically blazed gratings, select among UV/Vis or Vis/NIR |
| Light Source | 75 watt xenon arc lamp; 150 watt xenon arc lamp with CD |
| Scan Rate | Millisecond over hundreds of nanometers with 1 nm resolution standard; many alternatives available |
| Mode of Detection | 2 PMTs, UV/Vis optimized; NIR available with InGaAs; option of photon counting for fluorescence |
| Stray Light Rejection | < 0.001 % |
| Single Wavelength Acquisition | Up to 20 MHz for arbitrary lengths of time |
| Intermediate Slit | 16 slits, spins at 62.5 Hz to achieve 1000 scans per second<br>Dark: 50 microsecond dark period between each millisecond scan |