

# MonoRa series | Monochromator

## Applications

- Spectroscopy
- Photoluminescence
- Fluorescence
- Raman Scattering
- Phosphorescence
- Colorimetry
- Spectroradiometry
- Photometry
- Laser Characterization
- Laser Scattering Monochromatic
- Light Source / High Rejection Filter

## Model Name per Optical Path

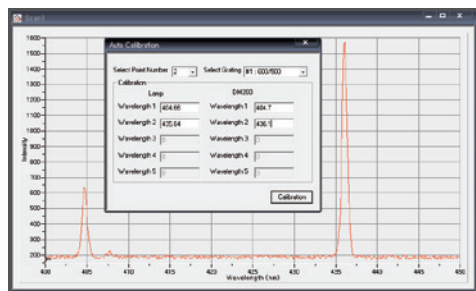
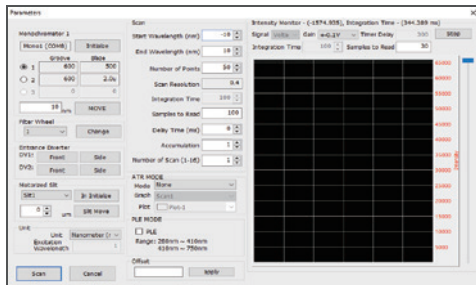
Model	Configuration	Model	Configuration
MonoRa 150i	Side Ent. / Front Exit Slits	MonoRa 200	Side Ent. / Side Exit Slits
MonoRa 321i	Side Ent. / Side Exit Slits	MonoRa 322i	Side Ent. / Front Exit CCD Port
MonoRa 323i	Side Ent. / Two Exit Slits	MonoRa 324i	Side Ent. / Exit Slits & Front CCD Port
MonoRa 501i	Side Ent. / Side Exit Slits	MonoRa 511i	Side Ent. / Two Exit Slits
MonoRa 512i	Side Ent. / Exit Slits & Front CCD Port	MonoRa 513i	Side Ent. / Two Exit CCD Port
MonoRa 522i	Two Ent. / Two Exit Slits	MonoRa 524i	Two Ent. / Exit Slits & Front CCD Port
MonoRa 751i	Side Ent. / Front Exit Slits	MonoRa 752i	Side Ent. / Exit Slits & Front CCD Port
MonoRa 753i	Side Ent. / Two Slits	MonoRa 754i	Two Ent. / Exit Slits & Front CCD Port

## Specification

Model					
	<b>MonoRa 150i</b>	<b>MonoRa 200</b>	<b>MonoRa 320i</b>	<b>MonoRa 500i</b>	<b>MonoRa 750i</b>
Focal Length	150 nm	200 nm	320 nm	500 nm	750 nm
Aperture Ratio	f/ 4.3	f/ 4.0	f/ 4.2	f/ 6.5	f/ 9.8
Optical Design	Computer Optimized Imaging Czerny-turner Type				
Optical Path	90 ° 1 Entrance, 1 Exit	180 ° 1 Entrance, 1 Exit	90 ° or 180 ° / 1 Entrance, 2 Exit	90 ° or 180 ° / 2 Entrance, 2 Exit	90 ° or 180 ° / 2 Entrance, 2 Exit
Scan Range	Mechanical Range 0 ~ 160 nm with a 1200 gr/nm				
Operating Range	185 nm to FIR with Available Grating and Detector				
Resolution	0.25 nm	0.2 nm	0.1 nm	0.05 nm	0.035 nm
Dispersion	4.6 nm	3.5 nm	2.4 nm	1.6 nm	1.0 nm
Accuracy	±0.25 nm	±0.2 nm	±0.2 nm	±0.2 nm	±0.1 nm
Repeatability	±0.04 nm				
Drive Step Size	0.005 nm with Stepper Motor		0.0025 nm with Stepper Motor		
Focal Plane size	26 mm Wide X 10 mm Height				
Detector Coverage	125 nm	95 nm	64 nm	41 nm	27 nm
Standard Slit	Width : 0~5 nm, 10 um via Micrometer Control Height : 4~15 mm (Selectable)				
Grating Mount	Dual Grating Turret		Triple Grating Turret		
Grating Size	32 * 32 mm	50 * 50 mm	68 * 68 mm		
Detector	UV, Vis : PDS-01 PMT, OPA 1024 PDA, Si / IR Detector : InGaAs, PBS, PBSE, MCT				
Software	Monoscan, Monoworks, Maple				
Sample Chamber	Maple (PL Mapping Sample Chamber) Ramboss (Raman System Sample Chamber)				



# Monoworks | Software



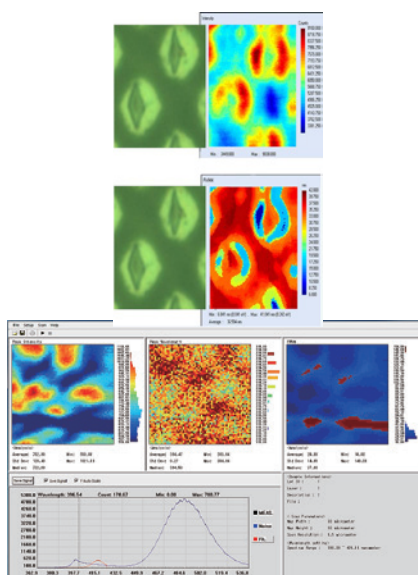
## Post Processing

- Peak Finder
- Graph Color, Data Average, Graph Control and 2D - 3D Conversion (Optional)
- Single / Double Monochromator Control (Optional) by User Selection
- Easy Parameter Selection
- Easy Aoom In / Out
- OS : Window 7, 10, 11

## Mode

- Input Range (Voltage : 0 ~ 0.01 V, 0 ~ 0.1 V, 0 ~ 1 V, 0 ~ 10 V)
- Scan Type : Auto, Excitation, Emission
- Sync / Unit : Wavelength, cm-1, eV
- Current Intensity Monitoring / Semi-auto Calibration
- Optional Transmittance, Reflectance & Luminescence
- Includes MonoRa series System Control and General Spectroscopy Applications

# Maple Mapping | Software



## Automatoion

- High Speed / High Precision XYZ Stage Control (Below 0.1 um)
- Laser Focus Calibration : Intelligent Auto Z-axis Stage Calibrates the Laser Beam Focus
- XYZ Mapping
- Real Time Measurement and Spectrum Display
- User Defined Threshold, Max and Min Values / Set Step Resolution and Scanning Area

## Mode

- Set the Wavelength Range, Resolution
- Integration Time, Accumulation