

# JASCO Portable Raman Spectrometers

## RMP-300 Series



JASCO has developed the new RMP-300 Series portable Raman spectrometer system, incorporating a fiber optic probe with a small X-Y-Z stage, compact laser, a high-throughput spectrograph and Peltier-cooled CCD detector. No special utilities such as coolants are required allowing the system to be used almost anywhere. The flexibility of optical fiber coupling enables remote measurements by locating the probe right at the sample. The fiber optic probe features an integrated CCD video camera for sample positioning and capturing of digital sample images. All operations are performed by the dedicated software package based on JASCO Spectra Manager II™.


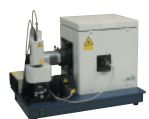

The RMP-300 Series consists of six models, the RMP-310, 315, 320, 325, 330, and 335, ranging from small, portable units suitable for in-situ measurements to research-grade systems to provide capabilities for a wide range of application requirements.

The RMP-300 system is controlled using Spectra Manager II™, JASCO's powerful Windows based cross-platform spectroscopy software package. The system is capable of both laboratory work and on-site measurements in the fields of process control, QC, forensics, art conservation and mineralogy.

- Higher spatial resolution and better S/N ratio
- Better portability and smaller space requirements
- No special utilities required
- Non-destructive remote measurements using a fiber optic probe
- Spectra Manager II™, user-friendly graphical interface



## Specifications

		RMP-310	RMP-315	RMP-320	RMP-325	RMP-330	RMP-335
							
<b>Monochromator</b>	Wavelength range:	200 - 3200 cm <sup>-1</sup>	200 - 3500 cm <sup>-1</sup>	100 - 8000 cm <sup>-1</sup>	100 - 3500 cm <sup>-1</sup>	100 - 8000 cm <sup>-1</sup>	100 - 3500 cm <sup>-1</sup>
	Resolution:	3 cm <sup>-1</sup> /Pixel with 532 nm excitation	4 cm <sup>-1</sup> /Pixel with 785 nm excitation	3 cm <sup>-1</sup> /Pixel with 532 nm excitation	4 cm <sup>-1</sup> /Pixel with 785 nm excitation	1 cm <sup>-1</sup> /Pixel with 532 nm excitation	1.5 cm <sup>-1</sup> /Pixel with 785 nm excitation
	Spectrograph:	f = 100 mm	f = 100 mm	f = 100 mm	f = 100 mm	f = 300 mm	f = 300 mm
	Grating:	1800 gr/mm (1200, 2400 gr/mm options available)	600 gr/mm (1200 gr/mm option available)	1800 gr/mm (1200, 2400 gr/mm options available) Dual grating capability, standard	600 gr/mm (1200, 1800 gr/mm option available) Dual grating capability, standard	1800 gr/mm (600, 1200, 2400 gr/mm options available) Dual grating capability, standard	600 gr/mm (1200 gr/mm option available) Dual grating capability, standard
<b>Laser</b>	Laser wavelength:	532 nm	785 nm	532 nm	785 nm	532 nm	785 nm
	Laser output power:	50 mW	100 mW	50 mW	100 mW	50 mW	100 mW
<b>Fiber probe</b>							
	Image magnification:	20X					
	Beam diameter:	50 µm diameter using the standard 20X objective					
	Length and termination:	1 m (3, 5, 10 m options available)					
	Sample observation:	CCD video camera					
	Observation magnification	250X (with 15 inch monitor, 20X objective, resolution 1024 × 768)					
	Sample observation illumination:	LED white light illuminator					
<b>Stage</b>	Sample stage:	manual XYZ stage					
	Stage size:	50 mm dia					
<b>CCD Detector</b>		Peltier cooled CCD detector					
		1024 × 256 pixels, pixel size: 26 µm					
<b>Standard software</b>		Spectrum measurement /analysis, JASCO canvas, wavenumber correction, Sadtler Know-It-All Search software					
<b>Dimensions</b>		620 mm (L) × 380 mm (W) × 430 mm (H),	620 mm (L) × 380 mm (W) × 430 mm (H),	810 mm (L) × 380 mm (W) × 595 mm (H),			
		Weight approximately 41 kg	Weight approximately 41 kg	Weight approximately 60 kg			

## Standard Accessories

Test sample	1 pc
Video capture unit for sample observation	1 set
USB cable	1 pc
USB hub	1 pc
AC cable	1 pc
CCD power supply	1 set
Instruction Manual	1 copy
Software backup CD	1 copy
Wrenches and screw drivers	1 set
Dust cover	1 pc



### Raman Micro Probe with a small XYZ sample stage

The microprobe incorporates a Rayleigh scattering rejection filter, a CCD-TV camera for sample positioning/monitoring and white light illumination. By utilizing the flexibility of the probe head, remote and non-destructive measurements can be achieved with the probe placed close to the sample. With a video CCD camera located in the probe head, the user can view the targeted sample image easily and can perform enhanced measurements of solid or powdered samples. The optical fiber length can be expanded up to 100 meters.

## Optional Accessories

<b>Grating system</b>		
6792-J301A	DG-01	Dual grating system
6792-J425A	HG-1000-600/B500	Grating (600 gr/mm)
6792-J421A	HG-1000-600	Grating (600 gr/mm)
6792-J422A	HG-1000-1200	Grating (1200 gr/mm)
6792-J423A	HG-1000-1800	Grating (1800 gr/mm)
6792-J424A	HG-1000-2400	Grating (2400 gr/mm)
<b>Optical fiber</b>		
6897-J910A	RMP-OFC-01	Optical fiber (1 m)
6897-J911A	RMP-OFC-03	Optical fiber (3 m)
6897-J912A	RMP-OFC-05	Optical fiber (5 m)
6897-J913A	RMP-OFC-10	Optical fiber (10 m)
<b>CCD</b>		
5986-0818	DV420A-OE	CCD detector
5986-0824	DU420A-OE	CCD detector
5986-0819	DU420A-FI	CCD detector
5986-0825	DU401A-BV	CCD detector
5986-0820	DU401A-BR-DD	CCD detector
<b>Objective</b>		
1108-0101	LMPFLN 20X	Objective lens (20X)
1108-0102	LMPFLN 50X	Objective lens (50X)
1108-0103	LMPFLN 100X	Objective lens (100X)
<b>Consumable</b>		
1120-0085		Optical fiber (1 m)
1120-0061		Optical fiber (3 m)
1120-0087		Optical fiber (5 m)
1120-0088		Optical fiber (10 m)
<b>Software</b>		
6897-J710A	RMP-ITS-300	Interval measurement/analysis program
<b>Others</b>		
5089-0053	799-66WCH	Power tap



● Specifications are subject to change without notice.

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