

JASCO Portable Raman Spectrometers

RMP-300 Series



The JASCO RMP-300 Series portable Raman spectrometer system incorporates 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 in the field or in a laboratory. 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 S/N ratio
- Portability, 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
							
Monochromator	Wavelength range:	200 - 3200 cm ⁻¹	200 - 3500 cm ⁻¹	100 - 8000 cm ⁻¹	100 - 3500 cm ⁻¹	100 - 8000 cm ⁻¹	100 - 3500 cm ⁻¹
	Resolution:	3 cm ⁻¹ /Pixel with 532 nm excitation	4 cm ⁻¹ /Pixel with 785 nm excitation	3 cm ⁻¹ /Pixel with 532 nm excitation	4 cm ⁻¹ /Pixel with 785 nm excitation	1 cm ⁻¹ /Pixel with 532 nm excitation	1.5 cm ⁻¹ /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
Laser	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
Fiber probe							
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					
Stage	Sample stage:	manual XYZ stage					
	Stage size:	50 mm dia					
CCD Detector		Peltier cooled CCD detector					
		1024 × 256 pixels, pixel size: 26 µm					
Standard software		Spectrum measurement /analysis, JASCO canvas, wavenumber correction, Sadtler Know-It-All Search software					
Dimensions		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

Grating system		
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)
Optical fiber		
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)
CCD		
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
Objective		
1108-0101	LMPFLN 20X	Objective lens (20X)
1108-0102	LMPFLN 50X	Objective lens (50X)
1108-0103	LMPFLN 100X	Objective lens (100X)
Consumables		
1120-0085		Optical fiber (1 m)
1120-0061		Optical fiber (3 m)
1120-0087		Optical fiber (5 m)
1120-0088		Optical fiber (10 m)
Software		
6897-J710A	RMP-ITS-300	Interval measurement/analysis program
Others		
5089-0053	799-66WCH	Power tap



● Specifications are subject to change without notice.

JASCO INTERNATIONAL CO., LTD.

4-21, Sennin-cho 2-chome, Hachioji, Tokyo 193-0835, Japan
 Tel: +81-42-666-1322 Fax: +81-42-665-6512 Internet: <http://www.jascoint.co.jp/english/index.html>
 Australia, China, Hong Kong, India, Indonesia, Iran, Korea, Malaysia, New Zealand,
 Pakistan, Philippines, Russia, Singapore, South Africa, Taiwan, Thailand

JASCO INCORPORATED

8649 Commerce Drive, Easton, Maryland 21601-9903, U.S.A
 Tel: +1-800-333-5272 Tel: +1-410-822-1220 Fax: +1-410-822-7526 Internet: <http://www.jascoinc.com>
 Canada, Costa Rica, Mexico, Puerto Rico, Argentina, Brazil, Chile, Colombia, Paraguay, Peru, Uruguay

JASCO EUROPE s.r.l.

Via Confalonieri 25, 23894 Cremella (Lc), Italy
 Tel: +39-039-956439 Fax: +39-039-958642 www.jasco-europe.com
JASCO Deutschland www.jasco.de, **JASCO UK** www.jasco.co.uk, **JASCO France** www.jascofrance.fr,
JASCO Benelux www.jasco.nl, **JASCO Spain** www.jasco-spain.com, **JASCO Scandinavia** www.jascoscandinavia.se
 Austria, Finland, Greece, Hungary, Poland, Portugal, Romania, Switzerland, Algeria, Cyprus,
 Egypt, Israel, Jordan, Kuwait, Lebanon, Morocco, Saudi Arabia, Syria, Tunisia, Turkey, U.A.E.



Serving the global marketplace
 with Analytical Instrumentation

JASCO Corporation

2967-5, Ishikawa-cho, Hachioji, Tokyo 192-8537, Japan
<http://www.jasco.co.jp>

LRA01-0802 Printed in Japan