

Lightnovo RG spectrometer 2026



RGs body

Name	Laser power on sample	Spectral slit sizes	Signal-to-noise ratio*	Spectral Range	Raman shift	Spectral resolution	Laser spectral linewidth	Grating	Physical dimensions	Weight
Standard										
RGs 405 Confocal	10-80mW	20, 35, 50µm	1000:1	407 - 477nm	120 - 3700cm ⁻¹	0.06nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.03nm, 1.5cm ⁻¹	2800 l/mm	257x110x61 (LxWxH)	1500g
RGs 532 Confocal	10-110mW	20, 35, 50µm	1200:1	532 - 662nm	80 - 3700cm ⁻¹	0.1nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm ⁻¹	1800 l/mm	257x110x61 (LxWxH)	1500g
RGs 638 Confocal	10-75mW	20, 35, 50µm	1000:1	638 - 835nm	70 - 3700cm ⁻¹	0.1nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm ⁻¹	1300 l/mm	257x110x61 (LxWxH)	1500g
RGs 785 Confocal	10-95mW	20, 35, 50µm	1000:1	785 - 982nm	70 - 2500cm ⁻¹	0.15nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm ⁻¹	1200 l/mm	257x110x61 (LxWxH)	1500g
RGs 830 Confocal	5-70mW	20, 35, 50µm	900:1	830 - 1047nm	70 - 2400cm ⁻¹	0.17nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm ⁻¹	1100 l/mm	200x100x50 (LxWxH)	1500g
With LPR customisation										
RGs 405 Confocal LPR	0.01-70mW	20, 35, 50µm	800:1	407 - 477nm	120 - 3700cm ⁻¹	0.06nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.03nm, 1.5cm ⁻¹	2800 l/mm	257x110x61 (LxWxH)	1500g
RGs 532 Confocal LPR	0.01-100mW	20, 35, 50µm	1000:1	532 - 662nm	80 - 3700cm ⁻¹	0.1nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm ⁻¹	1800 l/mm	257x110x61 (LxWxH)	1500g
RGs 638 Confocal LPR	0.01-65mW	20, 35, 50µm	800:1	638 - 835nm	70 - 3700cm ⁻¹	0.1nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm ⁻¹	1300 l/mm	257x110x61 (LxWxH)	1500g
RGs 785 Confocal LPR	0.01-80mW	20, 35, 50µm	800:1	785 - 982nm	70 - 2500cm ⁻¹	0.15nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm ⁻¹	1200 l/mm	257x110x61 (LxWxH)	1500g
RGs 830 Confocal LPR	0.01-65mW	20, 35, 50µm	800:1	830 - 1047nm	70 - 2400cm ⁻¹	0.17nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm ⁻¹	1100 l/mm	257x110x61 (LxWxH)	1500g
With Power customisation										
RGs 638 Power	30-330mW	20, 35, 50µm	2500:1	638 - 835nm	70 - 3700cm ⁻¹	0.1nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm ⁻¹	1300 l/mm	257x110x61 (LxWxH)	1500g
RGs 785 Power	70-500mW	20, 35, 50µm	3000:1	785 - 982nm	70 - 2500cm ⁻¹	0.15nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm ⁻¹	1200 l/mm	257x110x61 (LxWxH)	1500g
RGs 830 Power	50-380mW	20, 35, 50µm	2500:1	830 - 1047nm	70 - 2400cm ⁻¹	0.17nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm ⁻¹	1100 l/mm	257x110x61 (LxWxH)	1500g
With Power and LPR customisation										
RGs 638 Power LPR	0.05-280mW	20, 35, 50µm	2000:1	638 - 835nm	70 - 3700cm ⁻¹	0.1nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm ⁻¹	1300 l/mm	257x110x61 (LxWxH)	1500g
RGs 785 Power LPR	0.1-500mW	20, 35, 50µm	2500:1	785 - 982nm	70 - 2500cm ⁻¹	0.15nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm ⁻¹	1200 l/mm	257x110x61 (LxWxH)	1500g
RGs 830 Power LPR	0.1-330mW	20, 35, 50µm	2000:1	830 - 1047nm	70 - 2400cm ⁻¹	0.17nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm ⁻¹	1100 l/mm	257x110x61 (LxWxH)	1500g
With HR customisation										
RGs 532 Confocal HR	10-110mW	20, 35, 50µm	800:1	535 - 600nm	80 - 2040cm ⁻¹	0.05nm/px, 1.5-3cm ⁻¹ / 2-4cm ⁻¹ / 2.5-3.5cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm ⁻¹	1300 l/mm	257x110x61 (LxWxH)	1.5 KG
With HR and LPR customisation										
RGs 532 Confocal HR LPR	0.01-100mW	20, 35, 50µm	600:1	535 - 600nm	80 - 2040cm ⁻¹	0.05nm/px, 1.5-3cm ⁻¹ / 2-4cm ⁻¹ / 2.5-3.5cm ⁻¹ corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm ⁻¹	2800 l/mm	257x110x61 (LxWxH)	1500g

*determined as peak signal-to-noise ratio of polystyrene spectrum at 1002cm⁻¹ at max. laser power at exposure 1 second, slit 35µm)

** variation during 8 hours