

Lightnovo RG spectrometer 2026



RGs body

Name	Laser power on sample	Max. laser power can vary in the range:	Laser power stability on sample (variation during 8 hours)	Spectral slit sizes	Signal-to-noise ratio* (determined as peak signal-to-noise ratio of polystyrene spectrum at 1002cm ⁻¹ at max. laser power at exposure 1 second, slit 35um)	Spectral Range	Raman shift	Spectral resolution	Laser spectral linewidth	Grating	Physical dimensions
Standard											
RGs 405	10-70mW	60-80mW	0.05%	20, 35, 50um	1000:1	407 - 481nm	90 - 3900cm ⁻¹	0.06nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50um	0.03nm, 1.5cm ⁻¹	2800 l/mm	257x110x61 (LxWxH)
RGs 532	10-100mW	90-110 mW	0.05%	20, 35, 50um	1200:1	534 - 658nm	80 - 3600cm ⁻¹	0.1nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50um	0.07nm, 1.5cm ⁻¹	1800 l/mm	257x110x61 (LxWxH)
RGs 638	5-75mW	65-80 mW	0.05%	20, 35, 50um	1000:1	641 - 835nm	70 - 3700cm ⁻¹	0.1nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50um	0.07nm, 1.5cm ⁻¹	1300 l/mm	257x110x61 (LxWxH)
RGs 785	5-95mW	85-100 mW	0.05%	20, 35, 50um	1000:1	789 - 982nm	70 - 2500cm ⁻¹	0.15nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50um	0.05nm, 0.7cm ⁻¹	1200 l/mm	257x110x61 (LxWxH)
RGs 830	5-70mW	60-75 mW	0.05%	20, 35, 50um	900:1	834 - 1047nm	70 - 2400cm ⁻¹	0.17nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50um	0.05nm, 0.7cm ⁻¹	1100 l/mm	257x110x61 (LxWxH)
With LPR customisation											
RGs 405 LPR	0.01-60mW	55-75 mW	0.05%	20, 35, 50um	800:1	407 - 481nm	90 - 3900cm ⁻¹	0.06nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50um	0.03nm, 1.5cm ⁻¹	2800 l/mm	257x110x61 (LxWxH)
RGs 532 LPR	0.01-90mW	70-100 mW	0.05%	20, 35, 50um	1000:1	534 - 658nm	80 - 3600cm ⁻¹	0.1nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50um	0.07nm, 1.5cm ⁻¹	1800 l/mm	257x110x61 (LxWxH)
RGs 638 LPR	0.01-65mW	55-70 mW	0.05%	20, 35, 50um	800:1	641 - 835nm	70 - 3700cm ⁻¹	0.1nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50um	0.07nm, 1.5cm ⁻¹	1300 l/mm	257x110x61 (LxWxH)
RGs 785 LPR	0.01-80mW	60-90 mW	0.05%	20, 35, 50um	800:1	789 - 982nm	70 - 2500cm ⁻¹	0.15nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50um	0.05nm, 0.7cm ⁻¹	1200 l/mm	257x110x61 (LxWxH)
RGs 830 LPR	0.01-65mW	55-70 mW	0.05%	20, 35, 50um	800:1	834 - 1047nm	70 - 2400cm ⁻¹	0.17nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50um	0.05nm, 0.7cm ⁻¹	1100 l/mm	257x110x61 (LxWxH)
With Power customisation											
RGs 638 Power	5-330mW	300-350 mW	0.05%	20, 35, 50um	2500:1	641 - 835nm	70 - 3700cm ⁻¹	0.1nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50um	0.07nm, 1.5cm ⁻¹	1300 l/mm	257x110x61 (LxWxH)
RGs 785 Power	5-500mW	450-500 mW	0.05%	20, 35, 50um	3000:1	789 - 982nm	70 - 2500cm ⁻¹	0.15nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50um	0.05nm, 0.7cm ⁻¹	1200 l/mm	257x110x61 (LxWxH)
RGs 830 Power	10-500mW	450-500 mW	0.05%	20, 35, 50um	2500:1	834 - 1047nm	70 - 2400cm ⁻¹	0.17nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50um	0.05nm, 0.7cm ⁻¹	1100 l/mm	257x110x61 (LxWxH)
With Power and LPR customisation											
RGs 638 Power LPR	0.1-280mW	250-300 mW	0.05%	20, 35, 50um	2000:1	641 - 835nm	70 - 3700cm ⁻¹	0.1nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50um	0.07nm, 1.5cm ⁻¹	1300 l/mm	257x110x61 (LxWxH)
RGs 785 Power LPR	0.01-500mW	450-500 mW	0.05%	20, 35, 50um	2500:1	789 - 982nm	70 - 2500cm ⁻¹	0.15nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50um	0.05nm, 0.7cm ⁻¹	1200 l/mm	257x110x61 (LxWxH)
RGs 830 Power LPR	0.1-400mW	450-500 mW	0.05%	20, 35, 50um	2000:1	834 - 1047nm	70 - 2400cm ⁻¹	0.17nm/px, 2-4cm ⁻¹ / 3-5cm ⁻¹ / 4-6cm ⁻¹ corresponding to slit sizes 20/35/50um	0.05nm, 0.7cm ⁻¹	1100 l/mm	257x110x61 (LxWxH)
With HR customisation											
RGs 638 Power LPR	0.1-280mW	250-300 mW	0.05%	20, 35, 50um	800:1	641 - 835nm	70 - 3700cm ⁻¹	0.1nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50um	0.07nm, 1.5cm ⁻¹	1300 l/mm	257x110x61 (LxWxH)
With HR and LPR customisation											
RGs 638 Power LPR	0.1-280mW	250-300 mW	0.05%	20, 35, 50um	600:1	641 - 835nm	70 - 3700cm ⁻¹	0.1nm/px, 3-5cm ⁻¹ / 4-6cm ⁻¹ / 5-7cm ⁻¹ corresponding to slit sizes 20/35/50um	0.07nm, 1.5cm ⁻¹	1300 l/mm	257x110x61 (LxWxH)