Lightnovo RG spectrometer 2026

RGs body

Name	Laser power on sample	Laser power stability on sample**	Spectral slit sizes	Signal-to-noise ratio*	Spectral Range	Raman shift	Spectral resolution	Laser spectral linewidth	Grating	Physical dimensions
Standard										
RGs 405	10-70mW	0.05%	20, 35, 50µm	1000:1	407 - 481nm	90 - 3900cm^{-1}	0.06nm/px, 3-5cm-1 / 4-6cm-1 / 5-7cm-1 corresponding to slit sizes 20/35/50µm	0.03nm, 1.5cm-1	2800 l/mm	257x110x61 (LxWxH)
RGs 532	10-100mW	0.05%	20, 35, 50µm	1200:1	534 - 658nm	80 - 3600cm^{-1}	0.1nm/px, 3-5cm-1 / 4-6cm-1 / 5-7cm-1 corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm-1	1800 l/mm	257x110x61 (LxWxH)
RGs 638	5-75mW	0.05%	20, 35, 50µm	1000:1	641 - 835nm	70 - 3700cm^{-1}	0.1nm/px, 3-5cm-1 / 4-6cm-1 / 5-7cm-1 corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm-1	1300 l/mm	257x110x61 (LxWxH)
RGs 785	5-95mW	0.05%	20, 35, 50µm	1000:1	789 - 982nm	70 - 2500cm^{-1}	0.15nm/px, 2-4cm-1 / 3-5cm-1 / 4-6cm-1 corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm-1	1200 l/mm	257x110x61 (LxWxH)
RGs 830	5-70mW	0.05%	20, 35, 50µm	900:1	834 - 1047nm	70 - 2400cm^{-1}	0.17nm/px, 2-4cm-1 / 3-5cm-1 / 4-6cm-1 corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm-1	1100 l/mm	257x110x61 (LxWxH)
With LPR customisation										
RGs 405 LPR	0.01-60mW	0.05%	20, 35, 50µm	800:1	407 - 481nm	90 - 3900cm^{-1}	0.06nm/px, 3-5cm-1 / 4-6cm-1 / 5-7cm-1 corresponding to slit sizes 20/35/50µm	0.03nm, 1.5cm^{-1}	2800 l/mm	257x110x61 (LxWxH)
RGs 532 LPR	0.01-90mW	0.05%	20, 35, 50µm	1000:1	534 - 658nm	80 - 3600cm^{-1}	0.1nm/px, 3-5cm-1 / 4-6cm-1 / 5-7cm-1 corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm^{-1}	1800 l/mm	257x110x61 (LxWxH)
RGs 638 LPR	0.01-65mW	0.05%	20, 35, 50µm	800:1	641 - 835nm	70 - 3700cm^{-1}	0.1nm/px, 3-5cm-1 / 4-6cm-1 / 5-7cm-1 corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm^{-1}	1300 l/mm	257x110x61 (LxWxH)
RGs 785 LPR	0.01-80mW	0.05%	20, 35, 50µm	800:1	789 - 982nm	70 - 2500cm^{-1}	0.15nm/px, 2-4cm-1 / 3-5cm-1 / 4-6cm-1 corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm^{-1}	1200 l/mm	257x110x61 (LxWxH)
RGs 830 LPR	0.01-65mW	0.05%	20, 35, 50µm	800:1	834 - 1047nm	70 - 2400cm^{-1}	0.17nm/px, 2-4cm-1 / 3-5cm-1 / 4-6cm-1 corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm^{-1}	1100 l/mm	257x110x61 (LxWxH)
With Power customisation										
RGs 638 Power	5-330mW	0.05%	20, 35, 50µm	2500:1	641 - 835nm	70 - 3700cm^{-1}	0.1nm/px, 3-5cm-1 / 4-6cm-1 / 5-7cm-1 corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm^{-1}	1300 l/mm	257x110x61 (LxWxH)
RGs 785 Power	5-500mW	0.05%	20, 35, 50µm	3000:1	789 - 982nm	70 - 2500cm^{-1}	0.15nm/px, 2-4cm-1 / 3-5cm-1 / 4-6cm-1 corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm^{-1}	1200 l/mm	257x110x61 (LxWxH)
RGs 830 Power	10-500mW	0.05%	20, 35, 50µm	2500:1	834 - 1047nm	70 - 2400cm^{-1}	0.17nm/px, 2-4cm-1 / 3-5cm-1 / 4-6cm-1 corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm^{-1}	1100 l/mm	257x110x61 (LxWxH)
With Power and LPR customisation										
RGs 638 Power LPR	0.1-280mW	0.05%	20, 35, 50µm	2000:1	641 - 835nm	70 - 3700cm^{-1}	0.1nm/px, 3-5cm-1 / 4-6cm-1 / 5-7cm-1 corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm^{-1}	1300 l/mm	257x110x61 (LxWxH)
RGs 785 Power LPR	0.01-500mW	0.05%	20, 35, 50µm	2500:1	789 - 982nm	70 - 2500cm^{-1}	0.15nm/px, 2-4cm-1 / 3-5cm-1 / 4-6cm-1 corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm^{-1}	1200 l/mm	257x110x61 (LxWxH)
RGs 830 Power LPR	0.1-400mW	0.05%	20, 35, 50µm	2000:1	834 - 1047nm	70 - 2400cm^{-1}	0.17nm/px, 2-4cm-1 / 3-5cm-1 / 4-6cm-1 corresponding to slit sizes 20/35/50µm	0.05nm, 0.7cm-1	1100 l/mm	257x110x61 (LxWxH)
With HR customisation										
RGs 638 Power LPR	0.1-280mW	0.05%	20, 35, 50µm	800:1	641 - 835nm	70 - 3700cm^{-1}	0.1nm/px, 3-5cm-1 / 4-6cm-1 / 5-7cm-1 corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm^{-1}	1300 l/mm	257x110x61 (LxWxH)
With HR and LPR customisation										
RGs 638 Power LPR	0.1-280mW	0.05%	20, 35, 50µm	600:1	641 - 835nm	70 - 3700cm^{-1}	0.1nm/px, 3-5cm-1 / 4-6cm-1 / 5-7cm-1 corresponding to slit sizes 20/35/50µm	0.07nm, 1.5cm^{-1}	1300 l/mm	257x110x61 (LxWxH)

*determined as peak signal-to-noise ratio of polystyrene spectrµm at 1002cm-1 at max. laser power at exposure 1 second, slit 35µm)
** variation during 8 hours