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 (Confocal/ single mode)										
RGs 405 Confocal	10-60mW	20, 35, 50um	1000:1	407 - 477nm	90 - 3700cm-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)	1500g
RGs 532 Confocal	10-50mW	20, 35, 50um	1200:1	532 - 662nm	90 - 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	1800 l/mm	257x110x61 (LxWxH)	1500g
RGs 638 Confocal	10-70mW	20, 35, 50um	1000:1	638 - 835nm	90 - 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)	1500g
RGs 785 Confocal	10-70mW	20, 35, 50um	1000:1	785 - 982nm	70 - 2100cm-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)	1500g
RGs 830 Confocal	5-70mW	20, 35, 50um	900:1	830 - 1047nm	70 - 2400cm-1	0.17nm/px, 2-4cm-1 / 3-5cm-1 / 4-6cm-1 corresponding to slit sizes 20/35/50um	0.05nm, 0.7cm-1	1100 l/mm	200x100x50 (LxWxH)	1500g
With LPR customisation										
RGs 405 Confocal LPR	0.01-70mW	20, 35, 50um	800:1	407 - 477nm	120 - 3700cm-1	0.06nm/px, 3-5cm-1 / 4-6cm-1 / 5-7cm-1 corresponding to slit sizes 20/35/50um	0.03nm, 1.5cm-1	2800 l/mm	257x110x61 (LxWxH)	1500g
RGs 532 Confocal LPR	0.01-100mW	20, 35, 50um	1000:1	532 - 662nm	80 - 3700cm-1	0.1nm/px, 3-5cm-1 / 4-6cm-1 / 5-7cm-1 corresponding to slit sizes 20/35/50um	0.07nm, 1.5cm-1	1800 l/mm	257x110x61 (LxWxH)	1500g
RGs 638 Confocal LPR	0.01-65mW	20, 35, 50um	800:1	638 - 835nm	70 - 3700cm-1	0.1nm/px, 3-5cm-1 / 4-6cm-1 / 5-7cm-1 corresponding to slit sizes 20/35/50um	0.07nm, 1.5cm-1	1300 l/mm	257x110x61 (LxWxH)	1500g
RGs 785 Confocal LPR	0.01-80mW	20, 35, 50um	800:1	785 - 982nm	70 - 2100cm-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)	1500g
RGs 830 Confocal LPR	0.01-65mW	20, 35, 50um	800:1	830 - 1047nm	70 - 2400cm-1	0.17nm/px, 2-4cm-1 / 3-5cm-1 / 4-6cm-1 corresponding to slit sizes 20/35/50um	0.05nm, 0.7cm-1	1100 l/mm	257x110x61 (LxWxH)	1500g
With Power customisation (multimode)										
RGs 638 Power	30-300mW	20, 35, 50um	2500:1	638 - 835nm	90 - 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)	1500g
RGs 785 Power	70-400mW	20, 35, 50um	3000:1	785 - 982nm	70 - 2100cm-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)	1500g
RGs 830 Power	50-380mW	20, 35, 50um	2500:1	830 - 1047nm	70 - 2400cm-1	0.17nm/px, 2-4cm-1 / 3-5cm-1 / 4-6cm-1 corresponding to slit sizes 20/35/50um	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, 50um	2000:1	638 - 835nm	70 - 3700cm-1	0.1nm/px, 3-5cm-1 / 4-6cm-1 / 5-7cm-1 corresponding to slit sizes 20/35/50um	0.07nm, 1.5cm-1	1300 l/mm	257x110x61 (LxWxH)	1500g
RGs 785 Power LPR	0.1-500mW	20, 35, 50um	2500:1	785 - 982nm	70 - 2100cm-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)	1500g
RGs 830 Power LPR	0.1-330mW	20, 35, 50um	2000:1	830 - 1047nm	70 - 2400cm-1	0.17nm/px, 2-4cm-1 / 3-5cm-1 / 4-6cm-1 corresponding to slit sizes 20/35/50um	0.05nm, 0.7cm-1	1100 l/mm	257x110x61 (LxWxH)	1500g
With HR customisation										
RGs 532 Confocal HR	10-110mW	20, 35, 50um	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 20/35/50um	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, 50um	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 20/35/50um	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