Desktop Raman Spectrometer

RMT-series

The RMT series Desktop Raman spectrometer is a professional Raman spectrometer for scientific research. It is characterized by its small size, ease of operation, and excellent performance. The series is divided into the RMT model and the RMT EZ model, where the RMT model has an external fiber optic probe for more flexibility in use.

Technical Advantages

1. Integrated space optical path

RMT EZ series desktop Raman spectrometer adopts an integrated optical path design with full free space coupling, and there is no optical fiber loss, diffusion, and spectral instability caused by free fiber vibration. Its spectral sensitivity is about 2 to 5 times that of the traditional optical fiber optical path, that is, the signal-to-noise ratio of the spectrum of this series of products is significantly higher under the same test conditions.

Another major advantage of the space optical path is that it has good stability for long-term operation because it eliminates the problem of sensitivity reduction caused by fiber end face ablation and loss in principle.

2. Powerful PC software

PC software supplied with the spectrometer: FLAVOR is a powerful software with basic spectral acquisition control functions, but also wavelet smoothing, automatic CV calculation, and other characterisation functions.

3. High stability

Built-in self-calibration function, one-time calibration is maintenance-free for life

0~40℃ temperature drift within ±2cm-1, spectral resolution unchanged

4. Simple to use

No configuration, preheating, plug and play

Product Specifications*

Model	RMT785 EZ	RMT532	RMT785	RMT1064
Band Range	200~3200cm $^{-1}$	200~3200cm $^{-1}$	200~3200cm $^{-1}$	200~1800cm $^{-1}$
Resolution	7cm $^{-1}$ typical	9cm $^{-1}$ typical	9cm $^{-1}$ typical	8cm $^{-1}$ typical
Frequency Shift Error	≤ ±2cm $^{-1}$	≤ ±2cm $^{-1}$	≤ ±2cm $^{-1}$	≤ ±2cm $^{-1}$
Warm Drift	≤ ±2cm $^{-1}$ @ 0~40 ℃	≤ ±2cm $^{-1}$ @ 0~40 ℃	≤ ±2cm $^{-1}$ @ 0~40 ℃	≤ ±2cm $^{-1}$ @ 0~40 ℃
Laser Wavelength	785nm±0.5nm	532nm±0.5nm	785nm±0.5nm	1064nm±0.5nm
Laser Linewidth	< 0.1nm	< 0.1nm	< 0.1nm	< 0.1nm
Laser Power	0~500mW	0~100mW	0~500mW	0~500mW
Focus Adjustment Stroke	6mm, positioning accuracy 10um	6mm, positioning accuracy 10um	6mm, positioning accuracy 10um	6mm, positioning accuracy 10um
Powered by	5VDC 2A			5VDC 5A
Size	150*150*360mm	373.5*260*74mm		
Weight	< 3kg			
Data Interface	USB-B			
Operating Temperature	-20~40 ℃			
Storage Temperature	-40 ~ +80℃			

*Due to ongoing continuous product improvement, specifications are subject to change without notice.

Software Function

- Device connection management , reconnect or refresh device
- Saturation automatically adjusts the integration time, and records the real integration time and laser power
- Automatically calculate CV
- wavelet smoothing
- Automatic peak finding
- Model library management: create, delete, modify
- Model matching
- Lasers can be controlled independently or associated with equipment
- Continuous spectrum acquisition mode, or Raman acquisition mode
- Automatic calibration
- Performance Monitoring / Measurement
- Overlay / Delete Spectra, Selected Spectrum First
- Add multiple score pages
- Wavenumber/wavelength switching
- Manually specify the X-axis translation value
- Manually turn on / off laser cooling for easy heat control and power saving

SIMTRUM Singapore
Telephone: +65 6996 0391
Email: info@simtrum.com

SIMTRUM China
Telephone: +86 150 0085 3620
Email: sales@simtrum.cn

www.simtrum.com