

# WP Raman X series

## Powerful & comprehensive compact Raman



### POWER, FLEXIBILITY & STYLE

Single design philosophy, multiple configurations for research & OEM use

High sensitivity, compact bench based on our patented [VPH transmission gratings](#)

Choice of fiber input aperture: f/1.3 for maximum signal or f/1.8 for resolution

Modular design: spectrometer only / integrated laser / laser + interface optics

User-configurable input coupling & slit

Our 'OEM inside' design ensures reliable, consistent, thermally stable results

Harness the full power of Raman with a sensitive, configurable optical bench that can take you from idea to application development and out into the world. We've designed the X series specifically for the needs of Raman spectroscopy, leveraging our patented VPH transmission gratings to deliver superior efficiency at every wavelength, and consistent spectra every time. Our robust, modular opto-mechanical design adapts to **your** unique application needs with options to balance signal and noise with resolution, power consumption, and degree of system integration. We give you the power to make the measurements you need today and the flexibility to be ready for tomorrow, because the future of Raman - *your Raman* - is bright.

*We offer the Raman applications expertise & sample evaluation to help you find your ideal solution.*

[Contact us to get started!](#)

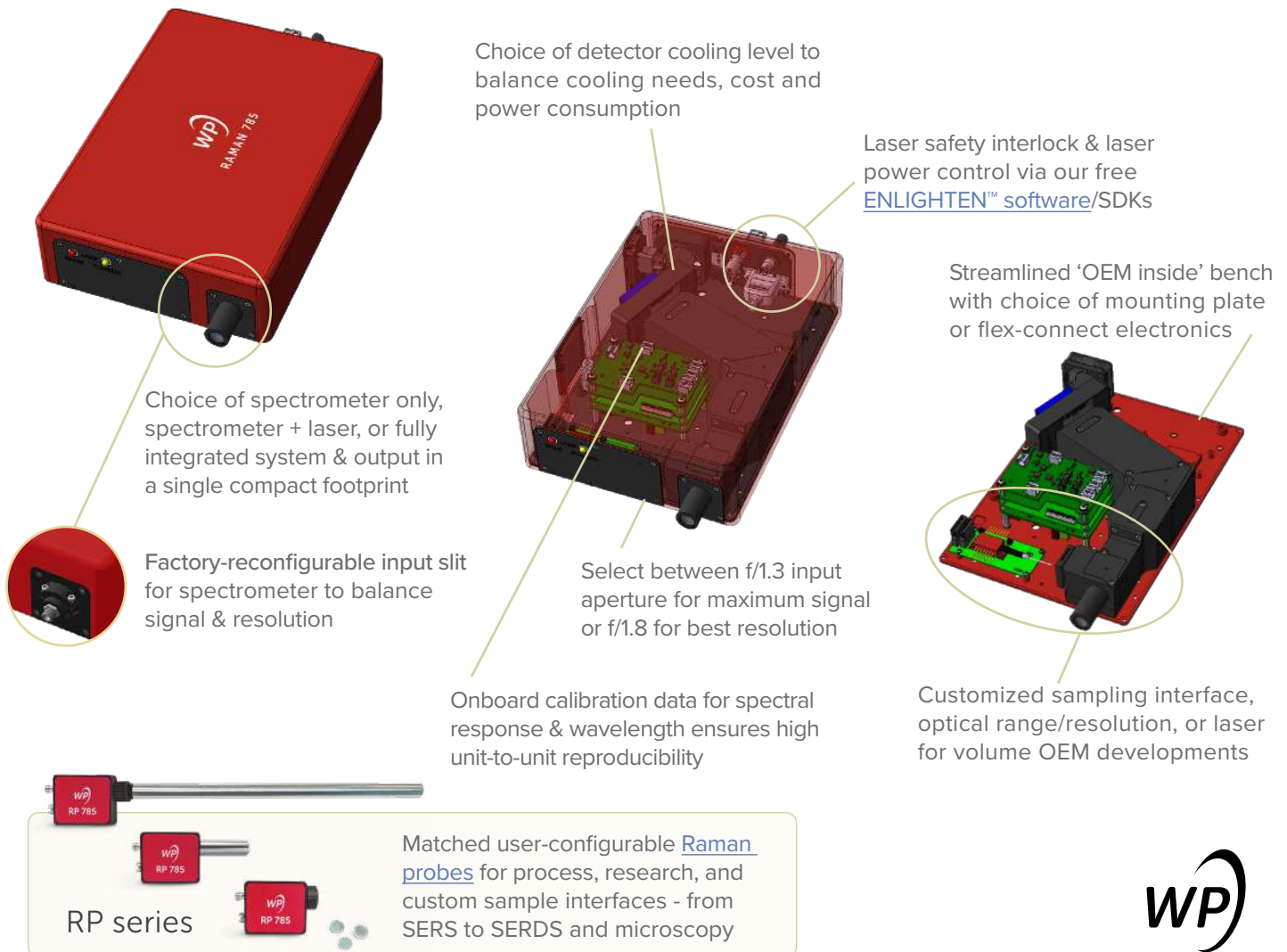


# Designed for Innovation

## Transform research to reality with 'OEM Inside'

We've created our Raman X series optical platform for the people who don't like to be held back, who are always thinking ahead to the next step, and who want an instrument that can get them there faster. We've worked with researchers who are developing innovative new applications of Raman, and with OEM instrument manufacturers who require reproducible Raman to realize their ideas. The problems they seek to solve vary widely, but many of the needs we hear are the same: sensitivity, stability, and consistent results. Dependable answers begin with high quality data you can trust, and a company you can trust to deliver.

That's why we've designed a unique line of Raman products to meet the needs of both, in a highly sensitive, configurable and manufacturable platform that accelerates an application's journey from research to reality. At the research/innovation stage, we get you started with a high throughput, low noise optical bench configured to your exact needs - and reconfigurable for future projects. Then, when you're ready to take your concept to market, we simply remove the cover. That's it. No redesign, no model redevelopment, no rework - just speed. We call it 'OEM Inside'. *Let's take a look.*



# WP Raman X series

## STANDARD PRODUCT SPECIFICATIONS & OPTIONS

One high-sensitivity optical bench, endless configurations to take you from research to reality. Standard models include spectrometer only, spectrometer + laser, or fully integrated spectrometer, laser & sampling optics. Design your own, or let us help you choose the best f/# and detector cooling for your needs with our applications knowledge & testing.

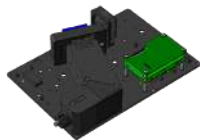
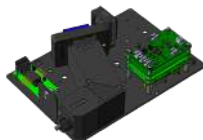
| PART NUMBER | DETECTOR OPTION | SPECTRAL RANGE              | RESOLUTION*         |                    | DETECTOR COOLING | LASER OPTION | LASER + PROBE | LASER SPECS       |
|-------------|-----------------|-----------------------------|---------------------|--------------------|------------------|--------------|---------------|-------------------|
|             |                 |                             | f/1.3 Input         | f/1.8 Input        |                  |              |               |                   |
| WP 532X     | -R              | 270 - 4700 cm <sup>-1</sup> | 10 cm <sup>-1</sup> | 8 cm <sup>-1</sup> | 10°C             | ✗            | ✗             | N/A               |
|             | -C              | 270 - 4250 cm <sup>-1</sup> | 11 cm <sup>-1</sup> | 9 cm <sup>-1</sup> | -15°C            |              |               |                   |
| WP 638X     | -R              | 270 - 3800 cm <sup>-1</sup> | 9 cm <sup>-1</sup>  | 7 cm <sup>-1</sup> | 10°C             | ✓            | ✓             | 200 mW, multimode |
|             | -C              | 270 - 3500 cm <sup>-1</sup> | 10 cm <sup>-1</sup> | 8 cm <sup>-1</sup> | -15°C            |              |               |                   |
| WP 785X     | -R              | 270 - 3500 cm <sup>-1</sup> | 8 cm <sup>-1</sup>  | 7 cm <sup>-1</sup> | 10°C             | ✓            | ✓             | 450 mW, multimode |
|             | -C              | 270 - 3100 cm <sup>-1</sup> | 9 cm <sup>-1</sup>  | 7 cm <sup>-1</sup> | -15°C            |              |               |                   |
| WP 830X     | -R              | 270 - 2950 cm <sup>-1</sup> | 9 cm <sup>-1</sup>  | 8 cm <sup>-1</sup> | 10°C             | ✓            | ✓             | 450 mW, multimode |
|             | -C              | 270 - 2950 cm <sup>-1</sup> | 10 cm <sup>-1</sup> | 8 cm <sup>-1</sup> | -15°C            |              |               |                   |
| WP 1064X**  | -C              | 225 - 2500 cm <sup>-1</sup> | 8 cm <sup>-1</sup>  | —                  | -15°C            | ✓            | ✓             | 450 mW, multimode |

\*\* The WP 1064X is currently available in OEM module configurations only.

\*Resolution specification for a standard 25 µm slit.

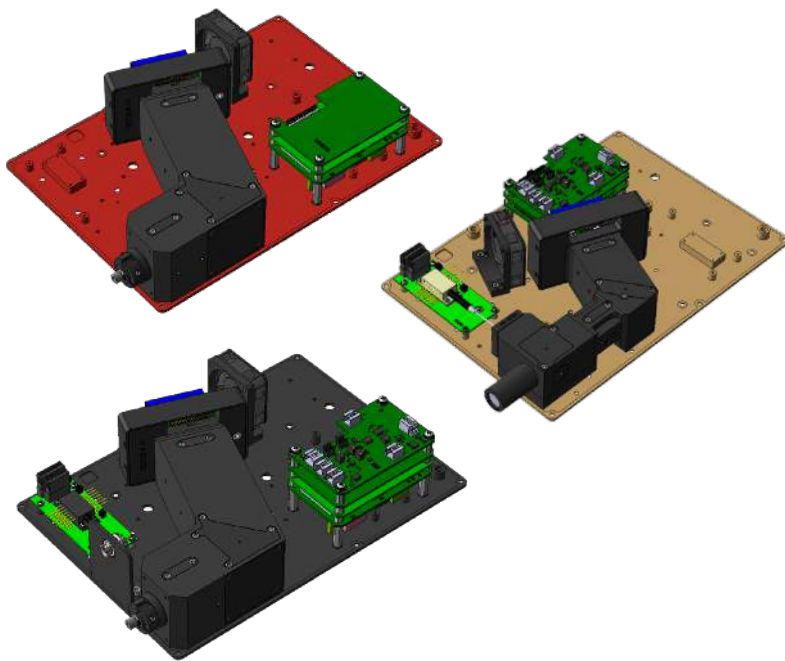
**CLASS 3B LASER PRODUCT**  
**WARNING – VISIBLE AND INVISIBLE LASER RADIATION**  
**AVOID EXPOSURE TO BEAM**



| CONFIGURATION<br>OPTIONS                                                                                                                           | SPECTROMETER (-IC)                                                                                                                                       | SPECTROMETER + LASER (-ILC)                                                                                                                        | SPECTROMETER +<br>LASER + PROBE (-ILP)                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Spectrometer input                                                                                                                                 | Fiber-coupled SMA 905 connector<br>(FC/PC, free space collimating lens, or open slit upon request)                                                       |                                                                                                                                                    | Fully integrated sampling optics:<br>22 mm working distance<br>120 μm laser spot size on sample                  |
| Laser output                                                                                                                                       | N/A                                                                                                                                                      | 450 mW, FC/PC connector                                                                                                                            |                                                                                                                  |
| Dimensions & weight                                                                                                                                | 24.3 x 17.2 x 6.0 cm, <2.3 kg                                                                                                                            |                                                                                                                                                    |                                                                                                                  |
| Operating temperature                                                                                                                              | 0°C to 40°C, non-condensing                                                                                                                              |                                                                                                                                                    |                                                                                                                  |
| Communications                                                                                                                                     | USB 2.0 Type B connector                                                                                                                                 |                                                                                                                                                    |                                                                                                                  |
| Minimum integration time                                                                                                                           | 8 ms                                                                                                                                                     |                                                                                                                                                    |                                                                                                                  |
| Software / Control                                                                                                                                 | <a href="#">ENLIGHTEN™ software</a> & SDKs for developers (included at no charge)                                                                        |                                                                                                                                                    |                                                                                                                  |
| SYSTEM TYPE                                                                                                                                        | FULLY MODULAR                                                                                                                                            | SEMI-INTEGRATED                                                                                                                                    | FULLY INTEGRATED                                                                                                 |
| Complete your research<br>& innovation system with<br>our perfectly matched<br>accessories                                                         | Add a user-configurable Raman probe,<br>laser & sample holder<br><br> | Add a user-configurable Raman probe<br>& sample holder<br><br> | Add a sample holder<br><br> |
| 'OEM INSIDE' MODEL                                                                                                                                 | SPECTROMETER + LASER (-IC)                                                                                                                               | SPECTROMETER + LASER (-ILC)                                                                                                                        | SPECTROMETER +<br>LASER + PROBE (-ILP)                                                                           |
| OEM schematic / layout<br>(optional mounting<br>plate with holes; flexible<br>connection between<br>optical bench & electronics<br>also available) |                                                                       |                                                                |                             |
| Dimensions & weight                                                                                                                                | 23.6 x 16.5 x 5.3 cm, <1.3 kg (input extends slightly out from baseplate)                                                                                |                                                                                                                                                    |                                                                                                                  |

# WP Raman X series for OEMS

Accelerate & simplify your product development



## DESIGNED WITH OEMS IN MIND

Superior optical design based on our patented [VPH transmission gratings](#)

Choice of fiber input aperture: f/1.3 for maximum signal or f/1.8 for resolution

'OEM inside' design for rapid development

Configurable platform: spectrometer only / integrated laser / laser + interface optics

Fingerprint + functional Raman range

Choice of detector cooling level to balance noise level, power draw & cost

Robust, thermally stable optical bench

Dream bigger and innovate faster with a Raman engine that adapts to your unique application needs and evolves with you as you move from proof-of-concept to launch. Our 'OEM inside' design approach ensures that the high-sensitivity optical bench you use for application development & testing is the same optical bench you take into the field - delivering reliable, consistent answers every time. We understand the details important to Raman OEMs: calibrations to ensure excellent unit-to-unit reproducibility, customization options, [ISO-certified](#) processes, full lifecycle support, and more. Our vertically integrated supply chain, volume manufacturing facility, and personal commitment stand behind your products, in volumes from tens to thousands.

*Partnership you can count on. Experience you can trust.*

[Contact us to get started!](#)

