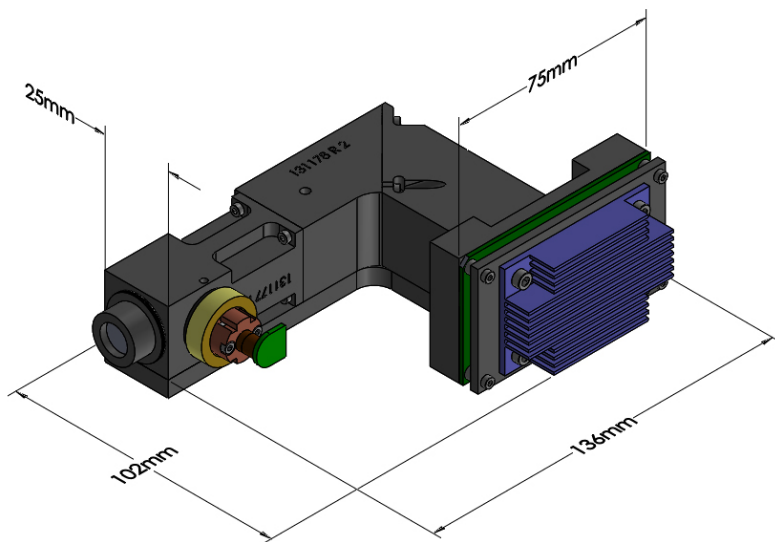


WP 785 OEM Raman Spectrometer

Superior performance in a streamlined design



FEATURES AND BENEFITS

- Industry-leading, high efficiency optics
- Patented VPH transmission gratings
- Diffraction-limited design for better SNR
- Excellent unit-to-unit reproducibility
- Robust, thermally stable optical bench
- Comprehensive engineering support
- Fiber coupled, free space & integrated laser models

At Wasatch Photonics, we've built a team that understands the unique needs of OEM customers, and a spectrometer bench that exceeds them. Our WP 785 OEM spectrometer is robust, compact, and easy to integrate, while delivering the same outstanding sensitivity and SNR of our standard products. It's designed in transmission with diffraction-limited optics to remain aligned over temperature and at every wavelength, facilitating intensity matching to <10% across the spectrum. Consistency is key when you're designing a product to be built in the thousands, and we deliver – in performance, in expertise, and in the quality of our service.

Partnership you can count on. Experience you can trust.
Contact us to get started!



WP 785 OEM Raman Spectrometer

PRODUCT SPECIFICATIONS & OPTIONS

The configuration options for our build-to-print 785 nm OEM Raman spectrometers include slit size (resolution), sample coupling (fiber coupled, free space, or integrated laser), and starting wavelength (dependent on input filter). Our regulated detector ensures excellent SNR and stability at low cost. Contact us to discuss your needs for custom wavelength or range.

| OPTICAL | | | | |
|---|-----------------------|--|-----------------|------------------|
| SAMPLE COUPLING OPTIONS > | | Fiber coupled | Free space | Integrated laser |
| Wavenumber Range ($\lambda_{ex} = 785$ nm) | | 200 - 2100 cm^{-1} available (340 cm^{-1} start with standard longpass filter) | | |
| Resolution | 25 μm slit | 8 cm^{-1} | | |
| | 50 μm slit | 14 cm^{-1} | | |
| f-number (f/#) | | 1.3 | | |
| Connector (fiber coupled models only) | | SMA 905 | free space port | free space port |

| DETECTOR & ELECTRONICS | | |
|---|--------------------------|-----------|
| DETECTOR COOLING > | | Regulated |
| Hamamatsu Detector | S11511-1006 CCD | |
| Detector Temperature | 10°C | |
| Detector Temperature Stability | $\pm 0.2^\circ\text{C}$ | |
| Active Pixels | 1024 x 64 | |
| Pixel Size | 14 x 14 μm | |
| Detector Quantum Efficiency: Average / Peak | $\sqrt{72\% / 80\%}$ | |
| Dynamic Range | 50,000 | |
| Signal to Noise Ratio (SNR) | 500:1 | |
| Readout Noise | 6 e- RMS | |
| Integration Time | 3 ms - 60 s | |
| Maximum Sample Frequency | 285 Hz | |
| Communications | USB 2.0 Type B connector | |

| MECHANICAL & ENVIRONMENTAL | | |
|----------------------------|-----------------------------|-----------------------------|
| | Fiber or Free Space Coupled | Integrated Laser Model (-L) |
| Size | 10.7 x 10.2 x 4.6 cm | 15.6 x 10.2 x 4.6 cm |
| Weight | 400 g | 475 g |
| Power Consumption | <500 mA @ 12 V | TBD |
| Operating Temperature | 0°C to 40°C, non-condensing | |

| LASER | |
|-----------|-----------------------------|
| | Integrated Laser Model (-L) |
| Laser CWL | 785 nm |
| Power | 100 mW |
| Type | Single mode |

Custom options available upon request

WP-PS_WP785OEM-Raman_20Sep18

