

WP 405 Raman Spectrometer Series

A compelling short-wavelength alternative



FEATURES AND BENEFITS

300 - 3700 cm^{-1} Raman range

Superior sensitivity, compact size

Robust optical design for stable, reproducible Raman spectra

Easy to use Raman software & SDKs

Ideal for creating a probe-based, modular Raman system

Configurable for your specific sample and needs

Look beyond 532 nm for comprehensive spectral coverage in materials analysis

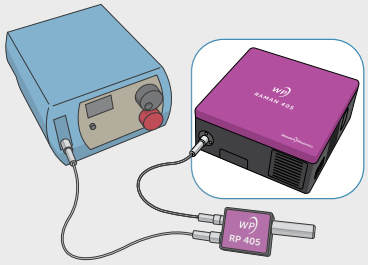
405 nm Raman offers unique benefits for certain materials, including higher signal, reduced fluorescence, and simultaneous collection of photoluminescence. We leverage that with a proprietary high-NA design specifically for Raman. It captures more light from your sample, guiding it through optimized optics and our own patented high-efficiency VPH transmission gratings to deliver more sensitivity, less noise, and faster measurements than you'd ever expect from a compact spectrometer. It's built with rock-solid mechanics to give you the reproducibility, stability, and durability you need. It's run by Raman-ready software and SDKs that make spectral acquisition easy. That leaves only one question - which model is right for you? Let's explore that answer together.

**Need advice or testing for your Raman application?
Contact us to get started!**

WP 405 Raman Spectrometer Series

STANDARD PRODUCT SPECIFICATIONS & OPTIONS

We believe Raman should be sensitive, robust, and reproducible, and its format should fit the unique requirements of your application. That's why we offer multiple configuration options that adapt to your needs, from choice of slit size and spectrometer input to detector cooling. Whether you're new to Raman or an experienced user, our experts can advise on the best value for you, and provide the data & testing to back it up.

| PARAMETER | | VALUE(S) | SYSTEM CONFIGURATION | |
|---|--------------------|---|--------------------------------|---|
| SPECTROMETER | Measurement Range* | | WP-405-SR-IC FULLY MODULAR | |
| | | | | 300 - 3700 cm ⁻¹ (-A, -R) |
| | | | 250-3000 cm ⁻¹ (-C) | |
| | Resolution | 15 μm slit | 8 cm ⁻¹ |  |
| | | 25 μm slit | 12 cm ⁻¹ | |
| | | 50 μm slit | 20 cm ⁻¹ | |
| | Spectrometer f/# | | f/1.3 | |
| Spectrometer input | | SMA 905 (lens or FC/PC optional) | | |
| Detector cooling options (see table below for details) | | Uncooled/ambient (-A) TEC-regulated, 10°C (-R) TEC-cooled, -15°C (-C) | | |

* Start and end wavenumber may be customized, but total range is fixed. Contact us for options.

| DETECTOR OPTIONS | | Uncooled (-A) | TEC-regulated (-R) | TEC-cooled (-C) |
|------------------|----------------------|--|--------------------|-----------------|
| | Detector Temperature | Ambient | 10°C ± 0.2°C | -15°C ± 0.1°C |
| | # of Pixels | 1024 | 1024 | 1024 |
| | Integration Time | 3 ms - 60 s | 3 ms - 60 s | 25 ms - 60 s |
| | Communications | ENLIGHTEN™ desktop software & SDKs included; data transfer via USB 2.0 | | |

Explore related products:

- [WP 532 spectrometer](#): 125 - 3200 cm⁻¹ range, same footprint
- Need more 532 nm Raman coverage? Consider our [extended range WP 532 ER spectrometer](#)
- Matched-NA [Raman probes](#) to complete your system
- Consult us for recommended 405 nm lasers