

# WP VIS-NIR Spectrometer Series

High throughput for speed or sensitivity



#### **FEATURES AND BENEFITS**

400-1080 nm wavelength range

f/2.0 input to capture more light

Superior optical design based on transmissive VPH grating

Fast data sampling rates

Fiber coupled & free space models

Compact, robust & configurable

Excellent thermal stability

We've maximized the efficiency of our spectrometers to give you more sensitivity, better SNR, and faster measurements. Collect more light with our f/2.0 input, keep more light with our high transmission VPH gratings & diffraction-limited optics, and detect more light with scientific-grade detectors. Our build-to-print options for resolution and sample coupling allow you to configure a spectrometer or system with the exact performance you need.

Wasatch Photonics offers the expertise & testing to find your optimal spectroscopy solution.
Contact us to get started!

## WP VIS-NIR Spectrometer Series

### STANDARD PRODUCT SPECIFICATIONS & OPTIONS

The configuration options for our build-to-print VIS-NIR spectrometers include slit size (resolution) and sample coupling (fiber coupled or free space). Our high-sensitivity design allows you to capture spectra with excellent signal to noise in a fraction of the time of many spectrometers with cooled detectors, at lower cost.

| OPTICAL                               |            |               |
|---------------------------------------|------------|---------------|
| Spectral Range                        |            | 400 - 1080 nm |
| Resolution                            | 10 μm slit | 1.5 nm        |
|                                       | 25 μm slit | 2 nm          |
|                                       | 50 μm slit | 4 nm          |
| f-number (f/#)                        |            | 2.0           |
| Connector (fiber coupled models only) |            | SMA 905       |

| DETECTOR & ELECTRONICS   |                          |  |
|--------------------------|--------------------------|--|
| Hamamatsu Detector       | S10420-1006 CCD          |  |
| Detector Temperature     | ambient                  |  |
| Active Pixels            | 1024 × 64                |  |
| Pixel Size               | 14 × 14 μm               |  |
| Dynamic Range            | 50,000                   |  |
| Signal to Noise (SNR)    | 500:1                    |  |
| Integration Time         | 7 ms - 60 s              |  |
| Maximum Sample Frequency | < 250 Hz                 |  |
| Communications           | USB 2.0 Type B connector |  |

| MECHANICAL & ENVIRONMENTAL |                               |  |
|----------------------------|-------------------------------|--|
|                            | Fiber or Free Space Coupled   |  |
| Size                       | 16.5 x 12.7 x 5.1 cm          |  |
| Weight                     | 1.2 kg                        |  |
| Operating Temperature      | 0 °C to 40 °C, non-condensing |  |

## Custom options available upon request



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