

UV-VIS HIGHLY SENSITIVE

Transmissive Grating Spectrometer

The Renegade UV Spectrometer utilizes Torrent Photonics' breakthrough technology in transmissive gratings by providing higher sensitivity compared to traditional reflective grating spectrometers. Our ability to manufacture all components aside from the sensor showcases Torrents' ability to create vertically integration solutions.

Product Overview:

Renegade's UV-VIS fiber-coupled design and manufacturability makes it a versatile solution for OEM analytical devices that demand high sensitivity and low footprint. Utilizing a transmissive grating made on fused silica substrate, the Renegade delivers optimal throughput and custom firmware options allows for ease of integration.

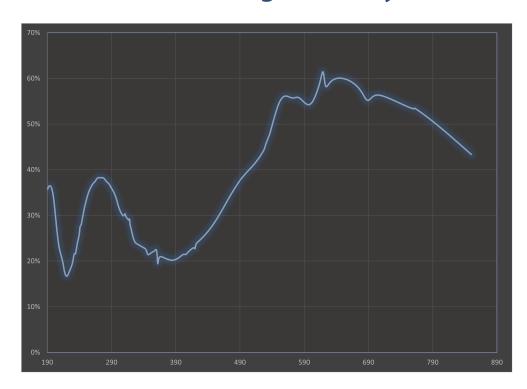
Features:

- Environmentally stable and robust design
- Compact & customizable for OEM solutions
- UV sensitive transmissive grating
- Repeatable low unit-to-unit variation
- High sensitivity



Renegade UV-VIS

Transmissive Grating Efficiency



COMPACT
HIGH-PERFORMANCE
OEM-Ready for
Analytical Devices

Renegade UV-VIS Specifications

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| Wavelength Range | 190 to 850nm |
| Optical Resolution | 1.25nm FWHM |
| Integration Time | 200us to 10s |
| Dynamic Range | 5000:1 |
| Input Fiber Connector | SMA |
| Signal to Noise Ratio | 300:1 |
| Detector | Hamamatsu-S11639 |
| Grating | 1250 lpmm Fused Silica transmission grating |
| Pixels | 2048 |
| Entrance slit | 20um |
| Numerical aperture | 0.22NA |
| Enhanced sensitivity lens | D-Lens on CCD |
| Stray Light (Monochromatic Input) | 0.012% (at +/- 10 x FWHM from peak) |
| Operating temperature range | Non-condensing: 0°- 50°C |
| Dimensions | 90 x 60 x 18mm body, 90 x 60 x 22mm including connector |
| Weight | 145g |
| Vertical resolution | 65,000 counts |
| Inputs/Outputs | SPI or USB, custom options available |
| Trigger Modes | Internal or external source, single, multiple accumulate, multiple average |
| Power Consumption | 3.3V 60mA |