

## UV ND Filters

This accessory can be used with any camera fitted with C-mount threads. Simply thread the attenuator assembly into the front of the camera and then slide the ND filter arrays to get the desired amount of attenuation. This device can be used with laser outputs from microwatts to Watts. Three filter holders are provided with two filters in each holder. Each filter in the holder provides for a different value of attenuation. To use, slide the desired holder into the housing slot. A click is felt when the filter is properly aligned with the beam. The holders provided will allow for attenuation of up to ND 6. C-mount interface for universal application to our CCD and Pyroelectric cameras 190-380nm attenuation covers Excimer, Helium Cadmium, and the Nd:YAG UV harmonic laser wavelengths. Attenuation with these ND filters permits the best use of the dynamic range of a beam profiling camera. Attenuation range of 0.3 to 6.0 optical densities (ND) Set consists of three slides with two filters in each slide The Six Filters include 0.3, 0.7, 1.0, 2.0, 3.0 and 4.0 optical densities

Two filters can be employed at one time for 0.3 – 6.0 optical attenuation in 0.3 or 0.4 ND steps

20mm clear aperture will not vignette any of our applicable camera sensors

Damage threshold = 100W/cm<sup>2</sup> for CW lasers and 20mJ/cm<sup>2</sup> for nano-second pulse width lasers

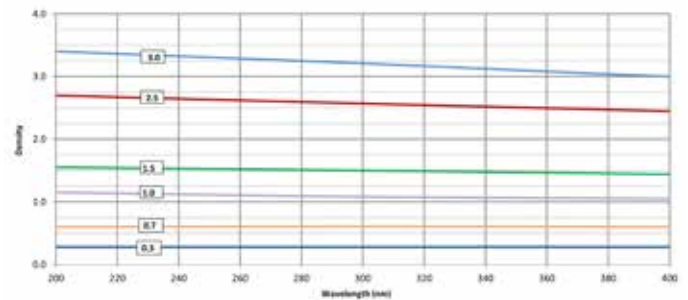
Additional Beam Splitters can be added for attenuation of high power UV lasers

UV attenuation system uses high quality optics from the leader in laser beam diagnostics

UV ND Filters



Filter ND value vs. Wavelength UV Range



### Specifications

Model	UV ND Filters
Nominal ND (UV)	0.3, 0.7, 1.0, 1.3, 1.7, 2.0, 2.3, 2.7, 3.0, 3.3, 3.7, 4.0, 4.3, 4.7, 5.0, 6.0
Aperture	Ø20mm
Damage threshold	100W/cm <sup>2</sup> CW, 20mJ/cm <sup>2</sup> , 10ns pulses
Filter material	Inconel
Part number	SP90228

## Specialized Filters

There are also specialized filters available to eliminate extraneous wavelengths when measuring very short or very long wavelengths where the CCD cameras are not sensitive and the desired signal can get swamped by extraneous light of other wavelengths.

The filter 355nm for monitoring the 3rd harmonic of YAG, transmits 355nm but blocks 532nm and 1064nm

Filter for 355nm



### Specifications

Model	Filter for 355nm
Transmission	~ 60 at 355nm, zero at 532nm, and 5E-6 at 1064nm
Filter Thickness	4mm
Filter Spacing	8mm
Flatness	2 waves in the visible
Damage threshold	50W/cm <sup>2</sup> / 0.6J/cm <sup>2</sup>
Part number	SPZ08246

This filter has the same standard thread so it can be mixed with all the other components.