

## Metallic ND Filters for the UV Spectral Region

These new metallic ND filters are made with UV fused silica substrates and coated with Inconel metal. They are designed to be used in the 200-400 nm spectral range but can be used with light wavelengths as long as 2.5 μm. The flat spectral response of the reflective Inconel-coated ND filters comes at the expense of some absorption of the incident light that limits the use of these filters to low power applications. All twelve filters can be purchased together in the FDU-SET kit.



### Specifications

- **Substrate Material:** UV Fused Silica
- **Front Surface Coating:** Inconel
- **Spectral Range:** 200-400 nm
- **Optical Density Tolerance:** 5%
- **Dimensions:** Ø2" x 1/16"
- **Damage Threshold:** 0.75 W/cm<sup>2</sup>

A metallic Inconel coating is used to attenuate the light in these filters because of its flat spectral response from the VIS to the NIR. However, Inconel will oxidize if used in an environment where the temperature is in excess of 100° C. The optical density (D) is given by

$$D = \log_{10} (1/T) \text{ or alternatively, } T = 10^{-D}$$

TOOLS  
OF THE  
TRADE

Put your Ø2" ND filters in an LMR2 (LMR2/M) mount for easy integration into an optical system. The LMR2 is shipped with one retaining ring to secure the optic and has a threaded mounting hole (see page 155). For ease, use a SPW604 to tighten the retaining ring.

ITEM #	\$	£	€	RMB	DESCRIPTION	NOMINAL OPTICAL DENSITY(S)
FDU-0.1	\$ 100.00	£ 63.00	€ 93.00	¥ 955.00	UV Metallic ND Filter	0.1
FDU-0.2	\$ 100.00	£ 63.00	€ 93.00	¥ 955.00	UV Metallic ND Filter	0.2
FDU-0.3	\$ 100.00	£ 63.00	€ 93.00	¥ 955.00	UV Metallic ND Filter	0.3
FDU-0.4	\$ 100.00	£ 63.00	€ 93.00	¥ 955.00	UV Metallic ND Filter	0.4
FDU-0.5	\$ 100.00	£ 63.00	€ 93.00	¥ 955.00	UV Metallic ND Filter	0.5
FDU-0.6	\$ 100.00	£ 63.00	€ 93.00	¥ 955.00	UV Metallic ND Filter	0.6
FDU-0.7	\$ 100.00	£ 63.00	€ 93.00	¥ 955.00	UV Metallic ND Filter	0.7
FDU-0.8	\$ 100.00	£ 63.00	€ 93.00	¥ 955.00	UV Metallic ND Filter	0.8
FDU-0.9	\$ 100.00	£ 63.00	€ 93.00	¥ 955.00	UV Metallic ND Filter	0.9
FDU-1.0	\$ 100.00	£ 63.00	€ 93.00	¥ 955.00	UV Metallic ND Filter	1.0
FDU-2.0	\$ 100.00	£ 63.00	€ 93.00	¥ 955.00	UV Metallic ND Filter	2.0
FDU-3.0	\$ 100.00	£ 63.00	€ 93.00	¥ 955.00	UV Metallic ND Filter	3.0
FDU-SET	\$ 900.00	£ 567.00	€ 837.00	¥ 8,595.00	UV Metallic ND Filter Kit	Set of All 12 FDU Filters

## Filter Wheels for Ø1" and Ø1/2" Optics

- USB 2.0 Interface for Automated Control
- 6 Indexed Positions
- Holds Unmounted Ø1" Filters



Some manual filter wheels are sold with the ND filters premounted.



- Indexed Filter Positions
- Single or Double Wheel Design
- Holds Ø1" or Ø1/2" Unmounted Filters

**See Pages 169-172**