VENUSLAB
OPTOELECTRONICS

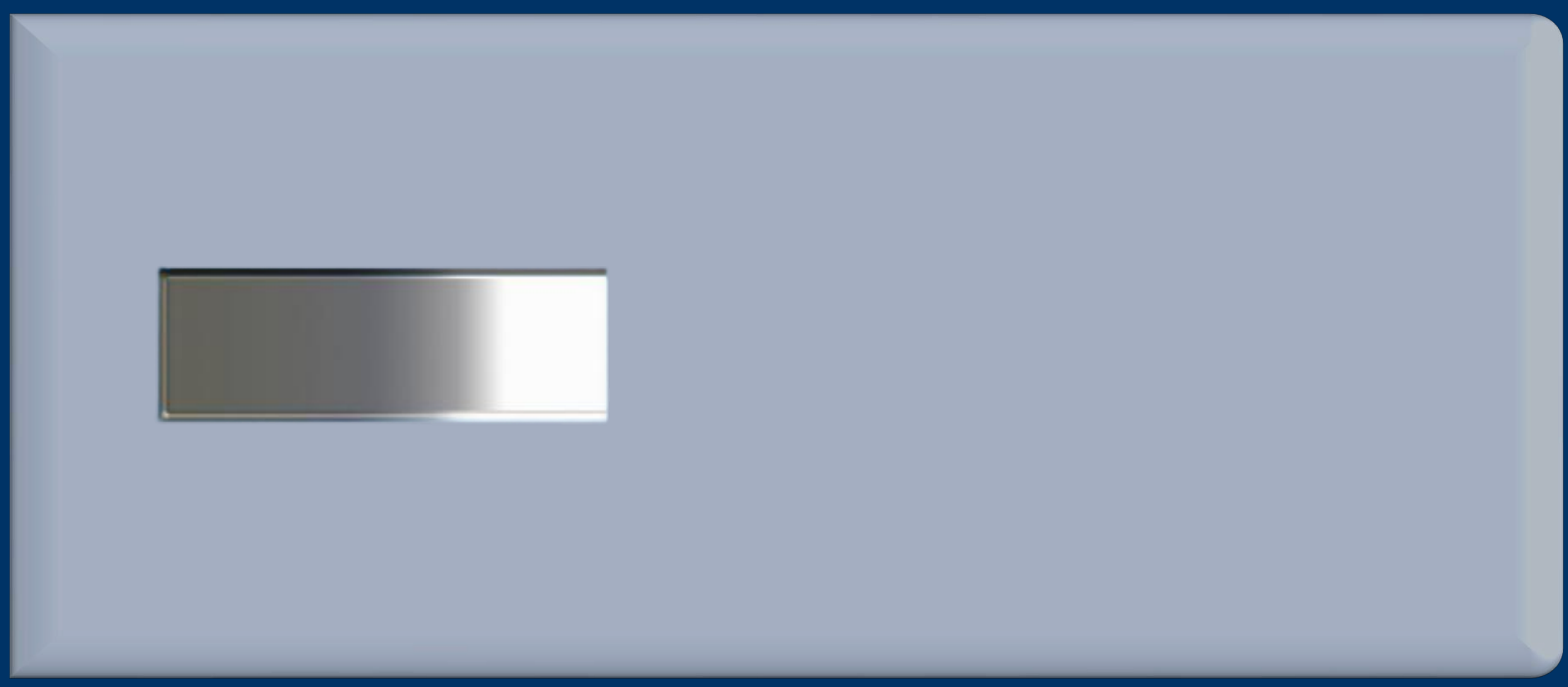
Precision
Meets
Simplicity

Optical Filter

Linear Variable Neutral Density Filter

Continuous Intensity Control via Sliding Adjustment

- Linear Variation
- High Linearity
- Broadband Coating
- Standard Size



One Platform Many Possibilities

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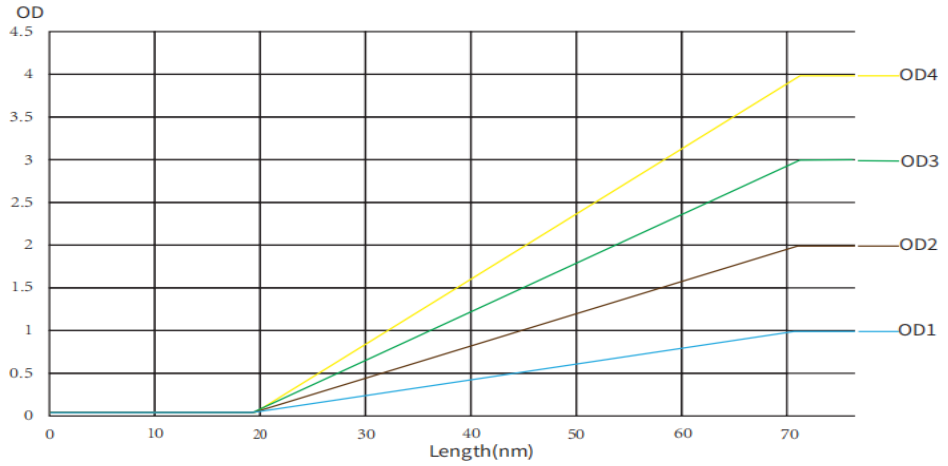
Overview

Analog Precision: Tuning Light Intensity with Linear Gradients

The VenusLab VLLND Series is designed to overcome the limitations of "discrete attenuation." In many experiments, fixed optical density filters (e.g., OD0.1, OD0.5) cannot provide the exact transmission required. The VLLND utilizes linear gradient coating technology to distribute optical density across a **76.2mm** length.

The beam's position determines the attenuation level, making intensity adjustment as intuitive as using a "sliding rheostat." With a surface quality of **80-50** and rigorous deviation testing (±5%) at **632.8nm**, this series ensures research-grade reliability.

Linear Gradient Performance Curves



Qualification

Linear Variable Filter Technical Specifications

Technical Parameter	Specification Data
Filter Type	Linear Variable Neutral Density
Wavelength Range	400 - 1100 nm (Recommended: 400-700nm)
Standard Deviation	± 5%
Linearity Deviation	± 5%
Surface Quality	80-50 Scratch-Dig
Design Wavelength	632.8 nm

Selection Chart

VLLND Series Ordering Information & Model List

Model	Optical Density (OD)	Wavelength (nm)	Size (mm)	Tolerance
VLLND-7625	0.8 - 2.0	400-1100	76.2 * 25.4 * 1.6	±5%

Explore Series

Model	Size (mm)	Tolerance	Optical Density (OD)	Wavelength (nm)
VLLND-7625	76.2 * 25.4 * 1.6	±5%	0.8 - 2.0	400-1100

📩 Get in touch with our team to explore configurations,request a quote,or learn more about customized solutions tailored to your needs.

Let us help you moves cience forward—faster ands marter.