See all 8 Products in Family

# 12.5 x 12.5mm, 3.4µm, Ultra High Contrast IR Wire Grid Polarizer

Stock **#73-432** **1 In Stock**

- 1 + **€1.085**,00

**ADD TO CART**

| Volume Pricing | |
|---|---|
| Qty 1+ | **€1.085,00** each |
| Need More? | Request Quote |

Prices shown are exclusive of VAT/local taxes

Product Downloads

## General

**Type:**

Linear Polarizer

## Physical & Mechanical Properties

**Length (mm):**

12.50

**Dimensions (mm):**

12.5 x 12.5 ±0.2

**Thickness (mm):**

0.68 ±0.05

| | |
|---|---|
| **Construction:** | |
| Wire Grid | |
| **Width (mm):** | |
| 12.50 | |
| **Microwire Material:** | |
| Gold | |

## Optical Properties

| | |
|---|---|
| **Angle of Incidence (°):** | |
| 0 ±25 | |
| **Extinction Ratio:** | |
| >10,000:1 @ 3 - 5µm | |
| **Substrate:** | |
| Silicon (Si) | |
| **Transmission (%):** | |
| >95 @ 3.4µm | |
| **Wavelength Range (nm):** | |
| 3000 - 5000 | |

## Environmental & Durability Factors

| | |
|---|---|
| **Operating Temperature (°C):** | |
| Up to 500 | |

## Regulatory Compliance

| | |
|---|---|
| **Certificate of Conformance:** | |
| View | |

# Product Details

- AR Coated for Superior Transmission
- High Heat Resistance with Low Thermal Expansion
- Feature Wide Angle of Incidence Range without Performance Loss

High Contrast IR Wire Grid Polarizers are ideal for broadband infrared applications that require high transmission and contrast, including spectroscopy, remote sensing, thermal imaging, or astronomy. Aluminum Microwire versions consist of a silicon substrate and are available in both 3-5µm and 7-12µm options. These polarizers will have up to 7000:1 contrast at their specified wavelengths, and a temperature resistance of up to 200°C. Gold Microwire versions consist of a silicon substrate with gold microwires and feature superior contrast of at least 10,000:1 @ 3.4µm. Due to their unique construction, these polarizers have a substantial temperature resistance of up to 500°C making them perfect even for the most demanding applications. High Contrast IR Wire Grid Polarizers allow the angle of incidence to vary from ±20° for the aluminum microwire versions or ±25° for the gold without displaying performance loss.

**Note:** Due to the exposed wire grid, special care should be taken when handling to prevent damage to the polarizer. The wire grid surface should never be touched directly, and parts should be handled by the edges only, with light pressure, using gloves. The glass side can be gently cleaned using isopropyl alcohol, but the wire grid side should only be cleaned using compressed air.

# Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our **Optics Cleaning Resources** for step-by-step guides and best practices. For personalized assistance, **Email us** or **Chat** with our technical support team.

**Component Handling Tools**

;