

UV-Vis Nanowire Grid Polarizers – Manual and Automated Versions

Automated UV-Vis
Nanowire Grid Polarizer

FEATURES

- Thin profile
- Large acceptance angle, up to 20 degrees
- High transmission and high contrast choices
- Manual and automated versions

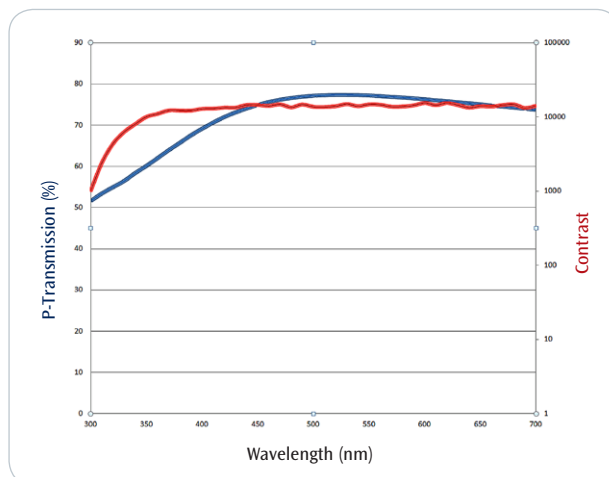
contrast polarizers covering the UV region and the Vis to NIR region. Using nanofabricating techniques, wire grid lines at a 100-nm pitch are etched on fused silica or glass substrate resulting in a high-performance polarizer. Compared to a traditional calcite polarizer, the large acceptance angle of the nanowire grid polarizer, greater than 20 degrees, eases alignment concerns during use. Additionally, the compact size makes these polarizers ideal for use in confined spaces. The element diameter is 25 mm and has a clear aperture of 19 mm. The polarizer fits a 2 x 3 inch slide mount.

Transmission and contrast ratio of the UV ultra contrast and the broadband polarizers are shown in the next column. Contrast ratio greater than 10,000:1 may be found, making these high-performance polarizers a competitive alternative to calcite polarizers.

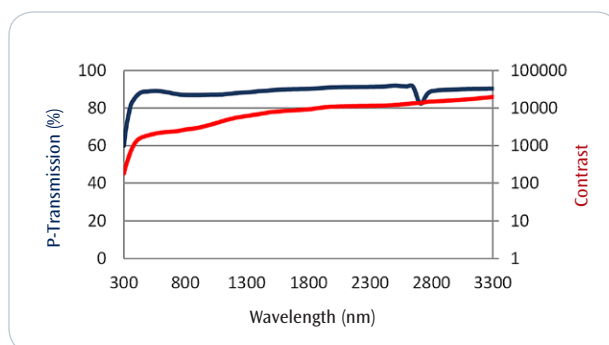
There are two manual polarizer types available. The short form has 5 degree scale resolution and the long form has scale resolution of 1 degree. The automated precision polarizers are fully computer controlled and offer the added benefit of increased setting reproducibility with accuracy of +/- 0.5 degree. With automated polarizers an analysis program can be set up through software, and includes data collection with some spectrophotometer software packages.

SPECIFICATIONS

| | |
|-------------------------------|------------------|
| Substrate | Fused Silica |
| Performance Range | |
| UV, Ultra Contrast | 240–400 nm |
| Vis/NIR | 300–3200 nm |
| Element Diameter | 25 mm |
| Clear Aperture | 19 mm |
| Dimensions (W x D x H) | |
| Manual | 50 x 86 x 17 mm |
| Precision | 50 x 146 x 17 mm |
| Automated | 50 x 146 x 55 mm |



UV Ultra-Contrast Polarizer performance data



Broadband Polarizer performance data

ORDERING INFORMATION

| PART NUMBER | DESCRIPTION |
|-------------|---|
| 190-2010 | Precision UV Polarizer, Ultra Contrast |
| 190-2012 | Manual UV Polarizer, Ultra Contrast |
| 190-2015 | Precision UV Polarizer, Ultra Contrast, Automated |
| 190-2020 | Precision Vis/NIR Broadband Polarizer, High Contrast |
| 190-2022 | Manual Vis/NIR Broadband Polarizer, High Contrast |
| 190-2025 | Precision Vis/NIR Broadband Polarizer, High Contrast, Automated |

Notes: The element diameter is 25 mm. Polarizers may not fit in the sample compartments of some smaller spectrophotometers.