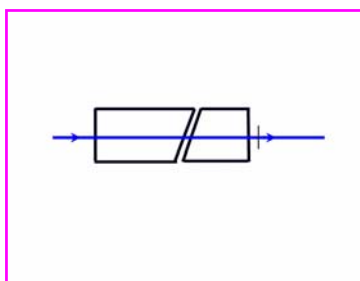


# UV Glan Taylor Polarizers



For a high degree of polarisation in the UV (from 220 – 350 nm) a special form of Glan Taylor polarizer can be used. They are made from a special UV grade of calcite, which transmits from 220nm and which is only available from a small number of mines. The Glan Taylor design is most appropriate for UV use.

Glan Taylor polarizers utilize the high bi-refringence of natural crystal calcite to produce a linearly polar-



ized output from a laser beam of random polarization. They consist of two prisms of calcite separated by an air-space. They produce a high degree of polarization in the transmitted beam with an extinction ratio of  $1 \times 10^{-6}$ . They have a transmittance of over 88% and an  $8^\circ$  field of view.

For these polarizers we use only UV laser grade calcite. This material is of high homogeneity, has few inclusions and shows no scattering when illuminated with a helium neon laser beam.

UV Glan Taylor polarizers are normally supplied as square cross section prisms with an aperture of 8, 10, 12, 15 or 20 mm. They are mounted in an absorbing black potting compound within a metal cell.

Single layer  $MgF_2$  anti-reflection coatings may be applied if required. These coatings provide a reflectance of less than 2% over a range of 220-400 nm.

## Typical Specifications

Material:	Crystal Calcite UV Laser grade
Cell:	Aluminium (black anodized)
Wavelength range:	220 - 2800 nm
Transmission of p-component:	88%
Extinction ratio:	$1 \times 10^{-6}$
Wavefront distortion:	$\lambda/4$ @ 633nm
Surface quality:	20-10
Field of view:	$\pm 4$ deg
Dimensions:	$\pm 0.25$ mm
Clear aperture:	>90%
Length/Aperture:	0.85
Centration to cell OD:	10 arcmin

**To request a quote or to order, please specify:**

Quantity — Calcite Grade (UV) — Aperture — AR Coating (if required)

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For a quotation — please phone, fax or email us with details of your requirements.