## **Z-Polarizer** Custom-made

**Schematic** 

Linearly polarized ligh

Linearly polarized ligh

### Z-Polarizer produces light polarization in the direction of its propagation. It enables you to obtain 3D measurement of molecules and crystal.

- Useful for various application such as laser scanning microscopy, tip-enhanced near-field microscopy, Raman microscopy, laser trapping, and laser processing.
- Z-polarizer is comprised of four-segment waveplate with the different orientation of the optical axis of each of the segmented waveplate so you can generate both radial polarization and azimuth polarization.
- In combination with condenser lens, Z-polarizer can produce a field of the light beam with a large electric field component in the z-direction (radial polarization). It can also produce azimuthal polarization by choice, a light collecting field that the z component of the electric field to zero.



Radial polarized light

Azimuth polarized light

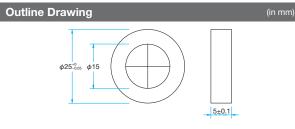
Specifications	
Material	Synthetic fused silica, fused quartz or quartz (below 350nm)
Diameter	φ25mm
Clear aperture	φ10mm
Incident angle	0°
Selectable wavelength range	200 – 2000nm
Center wavelength tolerance	±4% from center wavelength
Retardation tolerance	±0.05λ at center wavelength
Crystal axis tolerance	±2°

#### Guide

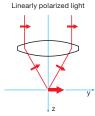
▶ If you need a mount to hold the Z-polarizer, please contact our Sales Division with your request.

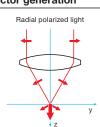
#### Attention

▶ The condenser lens is not included for the Z-polarizer.



# Schematic of Z-vector generation





Application Systems

Optics & Optical Coatings

Opto-Mechanics

Bases

Manual **Stages** 

**Actuators & Adjusters** 

Motoeized Stages

Light Sources & Laser Safety

Index

Guide

Mirrors

Beamsplitters

**Polarizers** 

**Multi-Element Optics** 

**Filters** 

Prisms

Substrates/Windows

**Optical Data** 

Maintenance

**Selection Guide** 

Polarizing Beamsplitters

Waveplates

**Polarizers**