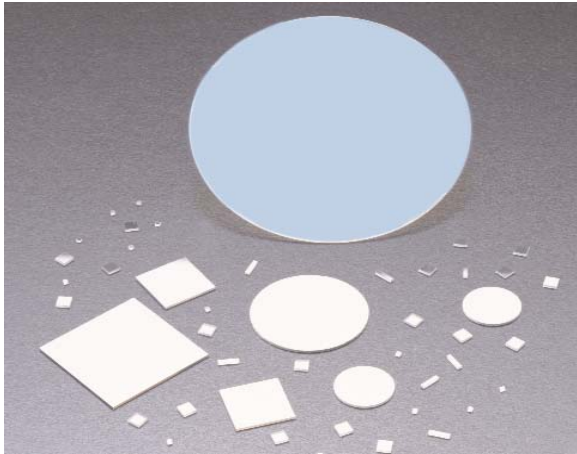


# VERSALIGHT WIRE GRID POLARIZERS



VersaLight is composed of a thin layer of aluminum MicroWires™ on a glass substrate. It sets a new standard for applications requiring extended spectral range, stability in harsh environments, high contrast and a wide field of view from the ultraviolet through the near infrared (300-2000 nm).

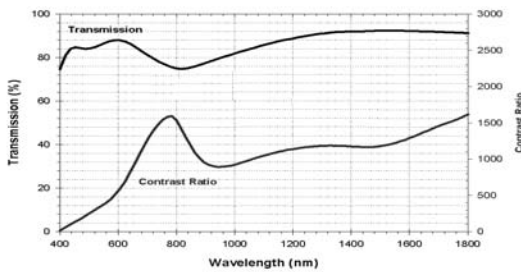
What separates VersaLight from dichroic sheet polarizers is that it functions as a reflective polarizer, unlike dichroic sheets that absorb unwanted light. This distinguishing feature allows VersaLight to survive at much lighter laser power levels.

VersaLight is very economic choice even in large sizes. The polarizers can be processed to any custom shape or polarizer orientation up to 4" in diameter.

NIR and IR VersaLight take advantage of the polarizers many benefits and have been designed for use from 450 to 2000 nm. Each part is anti-reflective coated on both sides with a formula that covers a broad wavelength range.

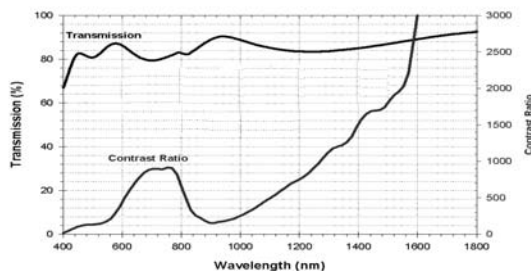
The UV VersaLight polarizer is very similar to the NIR and IR components except for a few changes. The polarizing surface is placed on a substrate of fused silica and the wire grid is not immersed in a protective overcoat.

## IR VersaLight



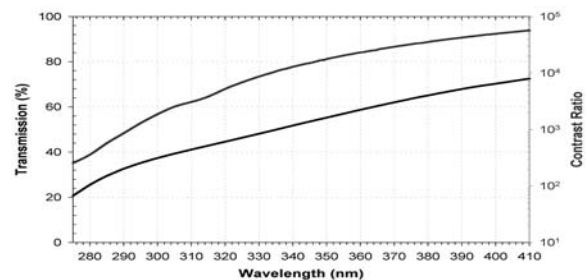
IR VersaLight Wire-grid Polarizer.

## NIR VersaLight



NIR VersaLight Wire-grid polarizer. This coating is recommended for applications requiring higher transmission from 700 nm to 1000nm

## UV VersaLight



Doubled UV VersaLight Polarizer with fused silica substrates. These data curves are taken for two VersaLight plates placed face to face with an air-spaced gap.

# VERSALIGHT WIRE GRID POLARIZERS

## Specifications

	Normal Incidence		45° Incidence
	AR Coated	Doubled	AR Coated
Typical contrast in reflection	>30:1	>30:1	>30:1
Thickness	0.7 mm	1.4 mm	0.7 mm
	<b>NIR/IR</b>		<b>UV</b>
Transmitted Wavefront Distortion <sup>(1)</sup>	$\lambda/2$ per inch		$\lambda/4$ per inch
Wavefront Range	400 nm to > 2000 nm		275 to 800 nm
Maximum Temperature <sup>(1)</sup>	200°C		50°C
Laser Damage Threshold <sup>(1,2)</sup>	50 KW/cm <sup>2</sup> CW		500 W/cm <sup>2</sup>
Dimensions	1.0 mm to 100 mm		1.0 x 1.0 inch square

(1) Applies only to single layer VersaLight

(2) Peak irradiance at 1540 nm

## Ordering information:

### Standard UV VersaLight Assembly

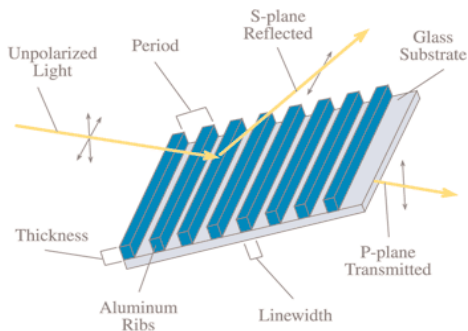
Shape	Dimension	Clear Aperture	Part Number
square	1.0" x 1.0"	>0.5" x 0.5"	VL-100-UV-S

## Ordering information:

### Standard NIR and IR VersaLight

Shape	Dimension	AR Coating	Part Number
square	0.5" x 0.5"	NIR	VL-050-NIR-S
		IR	VL-050-IR-S
	1.0" x 1.0"	NIR	VL-100-NIR-S
		IR	VL-100-IR-S
round	0.5" diameter	NIR	VL-050-NIR-R
		IR	VL-050-IR-R
	1.0" diameter	NIR	VL-100-NIR-R
		IR	VL-100-IR-R

Call for information on your custom size or on doubled assemblies.



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