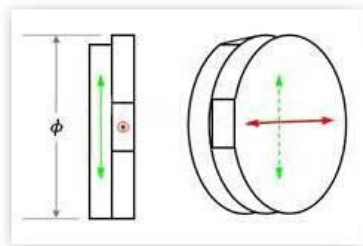


Zero Order Waveplates

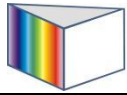
The **zero order waveplates or retarders** are designed to give a retardance of zero full waves, plus the desired fraction. Zero order waveplate shows better performance than multiple order waveplates. It has broad bandwidth and a lower sensitivity to temperature and wavelength changes. It should be considered for more critical applications.

Hangzhou Shalom EO offers the custom zero order waveplates or retarders upon customer's request, and the stocked mouldles are also available in fast delivery and low cost.



SPECIFICATIONS

Specifications	
Material	Quartz
Wavelength Range	200~2300 nm,
Dimension Tolerance	+/-0.1mm
Surface Quality	20 / 10
Parallelism	<1 arc Sec
Retardation Tolerance	< $\lambda/500$
Clear Aperture	>90%
Damage Threshold	>500 MW/cm ²
Coating	AR coating
Mount	Black Anodized Aluminium



Standard Wavelength:

355nm, 532nm, 632.8nm, 780nm, 808nm, 850nm, 980nm, 1064nm, 1310nm, 1480nm, 1550nm

1. Zero Order Waveplates-Optically Contacted

This type of zero order waveplate is constructed of two low order waveplate with their axes crossed. Thus, the effect of the first plate is canceled by the second, except for the residual difference between them.

- Optically Contacted
- AR Coated, $R < 0.2\%$
- High Damage Threshold
- Better Temperature Band width
- Wide Wavelength Bandwidth

Quarter Waveplates P/N #	Half Waveplates P/N #	Diameter (mm)
WPO410	WPO210	10
WPO412	WPO212	12.7
WPO415	WPO215	15
WPO420	WPO220	20
WPO425	WPO225	25
WPO430	WPO230	30

2. Zero Order Waveplates - Cemented by Epoxy

This type of zero order waveplate is constructed of two low order waveplate with their axes crossed. Thus, the effect of the first plate is canceled by the second, except for the residual difference between them.

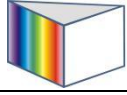
- Cemented by Epoxy
- AR Coated, $R < 0.2\%$
- Better Temperature Band width
- Wide Wavelength Bandwidth

Quarter Waveplates P/N #	Half Waveplates P/N #	Diameter (mm)
WPC410	WPC210	10
WPC412	WPC212	12.7
WPC415	WPC215	15
WPC420	WPC220	20
WPC425	WPC225	25
WPC430	WPC230	30

3. Zero Order Waveplate - Air spaced

- Air Spaced
- Double Retardation Plates
- AR Coated, $R < 0.2\%$
- High Damage Threshold
- Better Temperature Band width
- Wide Wavelength Bandwidth

Quarter Waveplates P/N #	Half Waveplates P/N #	Diameter (mm)
WPA410	WPA210	10
WPA412	WPA212	12.7
WPA415	WPA215	15
WPA420	WPA220	20
WPA425	WPA225	25
WPA430	WPA230	30



Shalom EO
Crystals, optics and components

Hangzhou Shalom Electro-optics Technology Co., Ltd.
