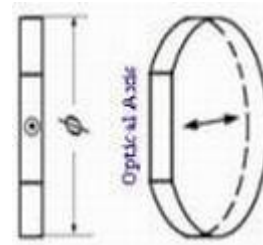


Multi-order Waveplates

These multiple order waveplates are made from a piece of crystal quartz with its optic axis parallel with the plane of polarization. A quarter wave plate has a net retardation of $(2k + 1) \pi / 2$, where k is an integer, and changes polarization from linear to circular or circular to linear. It will work as a half wave plate when used in double-pass as in a laser cavity. A half wave plate has a net retardation of $(2k + 1) \pi$, where k is an integer, and rotates the plane of polarization by 90° . Optionally, these waveplates are available mounted in a metal cell.

Specifications:

- Materials: **Crystal Quartz**
- Retardation Tolerance : $< \lambda/500$
- Wavelength Range: 240 ~ 2100nm
- Diameter Tolerance: $+0/-0.20$ mm
- Thickness: ≈ 1.0 mm
- Wavefront distortion: $\lambda/8$ over central 85% of aperture at 632.8 nm
- Parallelism: 1 arc second
- Surface Quality: 20/10 scratch and dig
- AR/AR Coating: $R < 0.25\%$ per surface



Φ (mm)	Uncoated	AR/AR Coated
	Part No.	Part No.
10.0	WPM1110	WPM1210
12.7	WPM1112	WPM1212
15.0	WPM1115	WPM1215
20.0	WPM1120	WPM1220
25.4	WPM1125	WPM1225