

KTP OPO Crystals

KTP OPO (Optical Parametric Oscillator) is the most efficient material for converting 1064 nm wavelength laser to 1570 nm ("eye safe") and other wavelengths.

Advantages

- Aperture up to 30x30 mm²
- · Length up to 40 mm
- Available in Regular, Monolithic (Single and Double pass with Mirror coating),
 Plain-Plain and Confocal OPO configurations
- NCPM for eye-safe signal (1570 nm) -No Walk-Off
- Efficiency of Monolithic OPO is 20-30% higher than a typical OPO
- · Divergence of Laser with Confocal OPO is lower than Plain-Plain OPO
- Walk-Off Compensating design (WOC) available at 2.1µm

Common Applications

- Laser Range Finders (LRF)
- Laser designators
- Other civil and military applications



Typical Specifications for OPO 1064 to 1570 nm

Aperture	Up to 30 x 30 mm ²
Orientation	Θ = 90°
Absorption coefficient	α < 50 ppm cm ⁻¹ at 1064 nm
Length	Up to 40 mm along X axis
Flatness	λ/10
Optical wedge (polarization along Y axis)	10 arc min.
Perpendicularity	10 arc min.
Scratch/dig	10/5
AR coatings	dual band R < 0.2 %
Wave front distortion control	λ/5
Guaranteed damage threshold	600 MW/cm ² (with coating) at 1064 nm, for 10 ns pulses

Raicol Crystals, founded in 1995, is a global leader in nonlinear and EO crystals growth, fabrication and assembly. Raicol offers a unique set of benefits to its customers:

- 50 years of crystal growth know-how and experience
- The global pioneers of RTP, HGTR KTP and PPKTP crystals and assembly
- One-stop shop, from crystal growth through coating to EO Cell assembly
- · Mass-production capabilities as well as small R&D quantities
- Fast delivery time
- Unmatched crystal quality
- Custom designs upon request, different housing options available