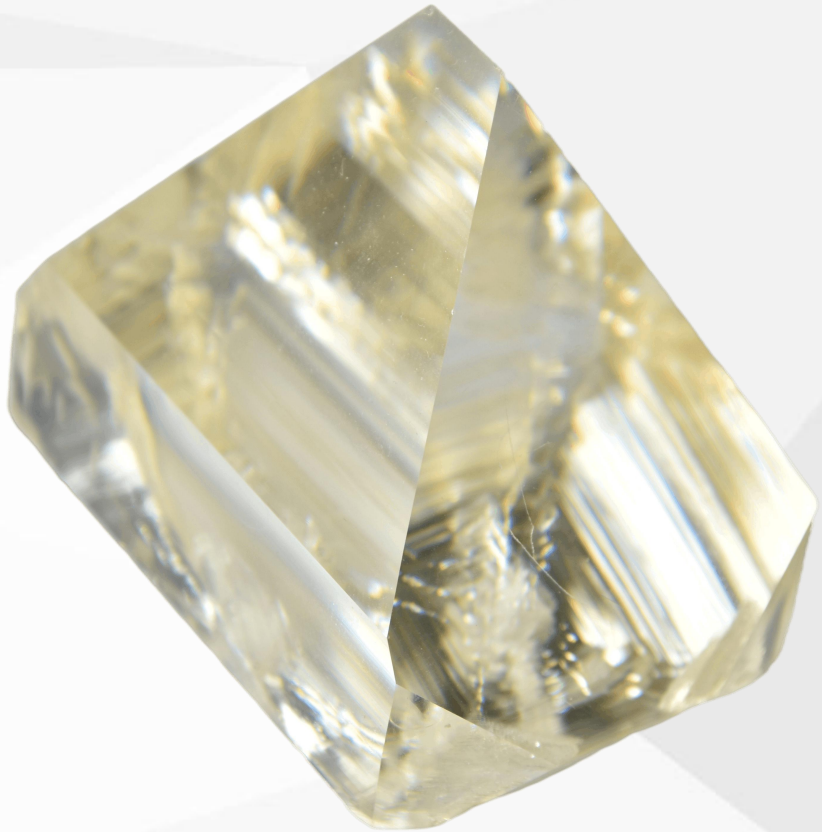
RTP crystals

RTP (Rubidium Titanyle Phosphate – RbTiOPO4) is a material now widely used for Electro Optical applications whenever low switching voltages are required.
RTP (Rubidium Titanyle Phosphate – RbTiOPO4) is an isomorph of KTP crystal which is used in nonlinear and Electro Optical applications. It has advantages of higher damage threshold (about 1.8 times of KTP), high resistivity, high repetition rate, no hygroscopic and no piezo-electric effect. It features good optical transparency from around 400nm to over 4μm and very importantly for intra-cavity laser operation, offers a high resistance to optical damage with power handling ~1GW/cm2 for 1ns pulses at 1064nm. Its transmission range is 350nm to 4500nm.



- RTP material is widely recognized for its features,
- Q-switch (Laser Ranging, Laser Radar, medical laser, Industrial Laser)
- Laser power/phase modulation
- Pulse Picker

RTP crystals

Advantages of RTP:

It is an excellent crystal for Electro Optical applications at high repetition rate

Large nonlinear optical and electro-optical coefficients

Low half-wave voltage

No Piezoelectric Ringing

high damage threshold

High Extinction Ratio

Non-hygroscopic

Basic properties	
Transmission at 1064nm	>98.5%
Apertures Available	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15mm
Half wave voltages at 1064nm	1000V (3x3x10+10)
Pockels Cell size	Dia. 20/25.4 x 35mm (3x3 aperture, 4x4 aperture, 5x5 aperture)
Contrast ratio	>23dB
Acceptance Angle	>1°
Damage Threshold	>600MW/cm2 at 1064nm (t = 10ns)
Stability over a wide temperature range	(-50℃ – +70℃)