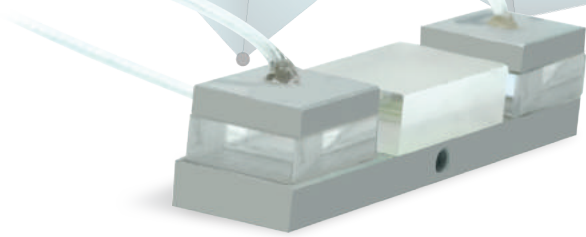


# SLAB RTP EO Cells



Used for electro-optics applications, the SLAB EO Cell is made of RTP crystals and offers superior properties for users in the aerospace, defense, medical, industrial, civil and scientific applications.

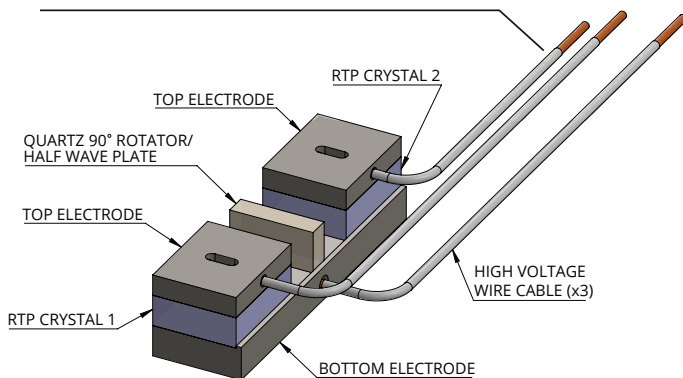
SLAB RTP EO Cells are assembled in a compact and flat thermally compensated double-crystal configuration. It may be used for SLAB cavity or multi-channels modulations. Due to the unique design, higher average power density can be allowed, as well as elliptical beam or two round beams.

## Common Applications

Q Switches | Pulse pickers  
Phase modulators | Amplitude modulators  
Cavity dumpers | Shutters  
Attenuators & Deflectors

## SLAB RTP EO Cell Structure

High voltage FEP wires cables L-150 mm  
Connectronics Corp. Part Number Et 1828



## Advantages

- Smaller Q switch, flat design
- Lower HWV (L/d factor)
- Possibility to spread power density for high power lasers using slab form beams (reduce power density by enlarge beam spot in one direction) or using beam splitters
- Faster rise time and no piezoelectric effect
- Possibility to achieve higher extinction ratio in EO cells due to compensation of refractive indexes gradient
- May operate at higher power density due to less sensitivity to induced thermo- effect due to parallel orientation of axis in both crystals (thermo- conductivity in Z direction is 1.5 times higher than in X or Y directions)

## Typical Specifications

Operational range	500-3000 nm
Transmission @ 1064 nm	> 99%
Half wave voltage	1.5 kV (for SLAB EO Cell size: 8X4X10)
Extinction ratio	Up to 30 dB
Clear aperture	1.5*1.5 mm to 15*15 mm
Crystal length	Up to 50 mm
Acceptance angle	< 4 deg.
Standard AR coating @ 1064 nm	R < 0.1%
Damage threshold	Up to 1 GW/cm <sup>2</sup> , at 1064 nm, 10 ns pulse

**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