

Pockels Cells

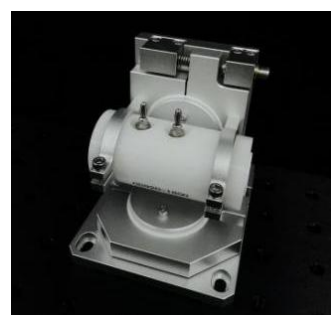
KTP (KTiOPO₄) Pockels Cells

KTiOPO₄ Pockels Cells is a kind of optical device with excellent comprehensive performance. KTP Pockels Cells have the advantages of high duty cycle operation, high damage threshold and very low piezoelectric resonance.

KTP Pockels Cells can be used in Q switch of high repetition frequency laser, pulse selector of high repetition frequency laser, femtosecond laser and other related fields. As to LiNbO₃ Pockels Cells' low optical damage threshold and KD*P Pockels Cells' relatively high half wave voltage and easy deliquation shortcomings, KTP Pockels Cells' can solve both of them.

Main features:

- High damage threshold
- Deliquescent
- Operate at low frequency with high duty ratio
- Compared with DKDP crystals, the piezoelectric resonance is very low
- Small HV voltage required (2x) compared to BBO Pockels Cells
- Standard clear aperture: 4 x 4, 6 x 6 and 8 x 8



Typical applications:

- Pulse pickup of high repetition rate laser
- Q switch of high repetition frequency laser with 1 kHz - 6 MHz
- Femtosecond laser field

Technical Parameters

Models	PCK4/PCR4	PCK6/PCR6
Clear aperture (mm)	Φ 3.5	Φ 5.5
Crystal size (mm)	4 × 4	6 × 6
Crystal length (mm)	10	10
Number of crystals	2	2
Half-wave voltage @1064nm	< 1.8KV DC	< 2.8KV DC
Capacitance	4 pF	< 6 pF
Transmittance	> 98%	> 98%
Extinction ratio	> 500:1	> 500:1
Shell size (mm)	Φ 25.4	Φ 25.4
Shell length (mm)	42.2	42.2

Refer to Appendix P39 for more optical characteristics