

LGS Electro-optical Pockels Cell

Introduction:

LGS electric-optical Pockels Cell is a new type of Q-switch designed by using of $\text{La}_3\text{Ga}_5\text{SiO}_{14}$ (LGS) crystal. LGS crystal is one kind of optical material with very high damage threshold (about 9 times as that of LN), excellent E-O coefficient, high temperature stability. The LGS series Q switch (Pockels Cell) is a practical electric-optic device that can be used for medium output energy lasers, and partially take place of DKDP、RTP and LiNbO_3 series Q-switches.



Main Advantages:

- ✧ For wavelength up to $3.2\mu\text{m}$
- ✧ Transmitted Wave Front Distortion $<1/4$
- ✧ Damage threshold $>900\text{MW}/\text{cm}^2$ (@1064nm,10ns)
- ✧ LGS partially replacing DKDP and LiNbO_3 series Q-switches

Crystro offers:

Crystal Dimension	2 x 2 - 8 x 8 mm
Shell Dimension	20-35 mm
Typical Aperture	8mm-20mm
Extinction Ratio	$> 500:1$
Wave Front Distortion	$< \lambda/6 @ 633\text{nm}$
Transmission	$> 98\% @ 1064\text{nm}$
Inter-electrode Isolation	< 1
Surface Quality	20-10 (after coating 40-20)
Capacitance	8 pF
AR Coating	AR/AR @ 1064nm (R<0.2%) other wavelength upon request
Damage Threshold	900MW/cm ² 10ns 10Hz 1064nm

Note: Above parameters for reference only, please contact our sales Rep. for your specific requirement.