

## Pockels Cell Inquiry Sheet

Please fill out as much as you can.

<b>Company Name:</b>	
<b>Person of Contact:</b>	
<b>Phone Number</b>	
<b>Email Address</b>	
<b>Pockels cell location</b>	<b>Outside of Cavity or Inside of Cavity</b>

### 1. Laser pulse parameter (at location of Pockels Cell<sup>1</sup>)

Wavelength	[nm]	
Laser active medium		
Beam diameter, 1/e <sup>2</sup> -definition	[mm]	
Beam divergence	[mrad]	
Laser media rod diameter	[mm]	
Laser pulse energy <sup>2</sup>		
Laser pulse width	[ns]	
Operating mode, proceed to point 3 (Mode locking, Q-switch, pulse picking, intensity modulation)		

- 1)  $E_{PC} = E_{OP}/(1-R)$ ,  $E_{PC}$ : pulse energy at location of Pockels cell;  
 $E_{OP}$ : pulse energy at output of laser; R: reflectivity of output coupler  
 2) regenerative amplifier : at the end of the amplification cycle

### 2. Type of Pockels cell

Hard aperture	[mm]	
Transmission	[%]	
Maximum extinction	[1:x]	
Crystal type	[KD*P, BBO, RTP]	
Operation mode (single pass or double pass)	[ $\lambda/4$ or $\lambda/2$ ]	

**3. Timing Requirements of High Voltage Switch (see diagrams below for explanation; If any of these parameters is meant to be variable, please state minimum and maximum)**

Regen. / pulse picker / Q – switch	[Yes / No]	
For regen. amp. / pulse picker :		
▪ Trigger electronics for RVD (Rectangular voltage pulse driver) required	[Yes / No]	
▪ $\Delta t_{\text{Laser}}$ / Repetition rate of master osc.	[MHz]	
▪ $\Delta t_{\text{HV pulse}}$ / Rep. rate of regen. amp.	[kHz]	
▪ max. rise / fall time of rectangular HV pulse	[ns]	
▪ $t_{\text{HV rise}}$ : min. / max. temporal width of rectangular HV pulse	[ns]	
▪ Point of operation / applied dynamic switching voltage / Amplitude modulation	[V]	
For Q-switched Laser		
▪ ON / OFF – Q – switching		
▪ Rep. rate of Q – switched Laser	[kHz]	

**4. Accessories**

Brewsterplate polarizer	[Yes / No]	
Extinction ratio of polarizer after Pockels cell		
$\lambda/4$ – Plate (for On-Q-switching)	[Yes / No]	

**Comment:**

**For more details, contact [sales@newsourcetechnology.com](mailto:sales@newsourcetechnology.com).**