

PCD-N-2 SERIES OEM POCKELS CELL DRIVER



PCD-N-2 is designed for Q-switching of nanosecond lasers without use of phase retardation plate. High voltage is applied to Pockels cell in order to inhibit oscillation. Pockels cell is

opened by negative polarity pulse allowing laser to radiate.

Working voltage on Pockel's cell is equal to sum of values U_1 and U_2 (Fig. 1).

SPECIFICATIONS

Maximum high voltage to cell (HV) pulse amplitude ($U_1 + U_2$)	5 kV
U_1 value (Fig 1)	equal to HV powering voltage
U_2 value (Fig 1)	equal to $0.25 \times U_1$ (optionally 0 V)
HV pulse fall time (a)	< 15 ns
HV pulse rise time, typical (b)	60 μ s
HV pulse duration, typical (c)	300 μ s ¹⁾
HV pulse repetition rate	\leq 250 Hz
HV pulse delay (d)	40 ns
External triggering pulse duration requirement	100–1200 μ s
External triggering pulse amplitude requirement	3–5 V (50 Ω)
External triggering pulse rise & fall time	< 20 ns
Board dimensions	92 \times 70 \times 22 mm ²⁾
Dia 3.2 mm mounting holes location	84 \times 62 mm
External powering requirements:	
DC supply	12–24 V, max 200 mA
HV supply	4 kV, 1 mA

¹⁾ Can be modified to 1200 μ s for lower repetition rates.

²⁾ Keep safety distance at least 5 mm from any side of board to other conductive parts.

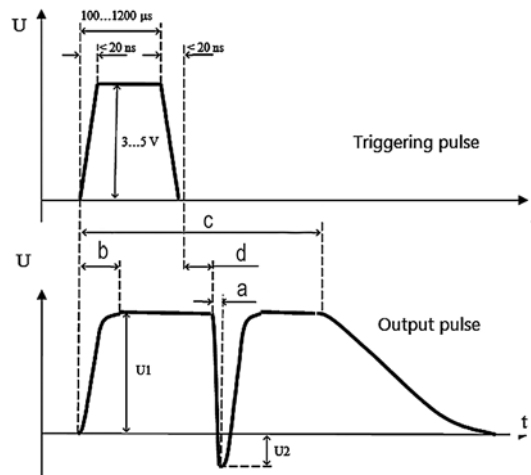


Fig. 1. Time diagram of PCD-N-2 driver