

SHORT PULSE PCKELS CELL DRIVERS – DP-SP

Features

- HV pulse amplitude up to 3.6 kV
 - Repetition rate up to 1 MHz
 - HV pulse duration down to 15 ns
 - Short circuit protection at driver output
 - Driver pad overheat sensor stops operation when overheated
 - Overheat optocoupled output signal
- LED for error indication (overheat and short circuit)
 - Alternative aluminum case option featuring conductive cooling possibility and relocated water and HV output connectors
 - OEM version available upon request

Configuration samples of DP-SP series drivers

CATALOGUE NUMBER OF DRIVER	DP-SP-50-3.6-AI	DP-SP-250-3.6-AI	DP-SP-500-2.6-AI	DP-SP-1000-1.8-AI
Maximal/minimal HV operating voltage	3.6 kV / 1.8 kV	3.6 kV / 1.8 kV	2.6 kV / 1.3 kV	1.8 kV / 0.9 kV
Maximal HV repetition rate	50 kHz	250 kHz	500 kHz	1000 kHz
Pulse duration	15 – 5000 ns	15 – 1000 ns	15 – 500 ns	15 – 250 ns
HV pulse rise time, typical	< 7 ns	< 7 ns	< 6.5 ns	< 6 ns
HV pulse fall time, typical	< 7 ns	< 7 ns	< 6.5 ns	< 6 ns
Output polarity	Positive			
HV power consumption	< 20 W	< 75 W	< 90 W	< 80 W
12 V / 24 V power consumption	1 W	4 W	< 6 W	9 W
Recommended HV power supply model	PS-40 or HVS100-40	PS-80 or HVS100-80	PS-120 or HVS100-120	PS-80 or HVS100-80
Dimensions	Standard - see Fig. 15, alternative – see Fig. 16 ¹⁾			
Cooling	Water ²⁾			

¹⁾ If alternative aluminum case is required, please add note "option 1" when ordering, for e.g., "Pockels cell driver DP-SP-250-3.6-AI option 1".

²⁾ Standard aluminum case is suitable for water cooling. Alternative aluminum case (option 1) is suitable for both, conductive and water cooling.

Driver needs to be mounted on heatsink unless it is cooled by water. Driver's base plate temperature needs to be lower than 35 °C in all regimes of operation. Power consumption for 6 pF load. Voltage or repetition rate derating is necessary if capacitance of your Pockels cell is higher. Contact vendor for details.

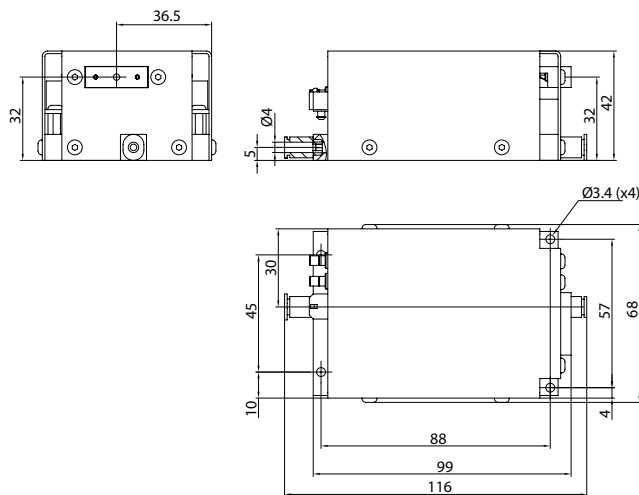


Fig. 16. Outline drawing of alternative encased version DP/DP-SP series Pockels cell drivers with relocated water and HV output connectors (option 1)