

DPB

HIGH VOLTAGE POCKELS CELL DRIVER



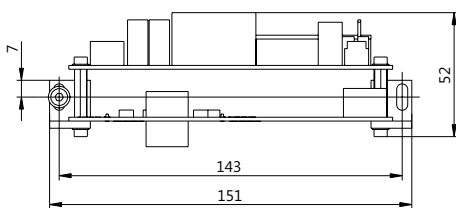
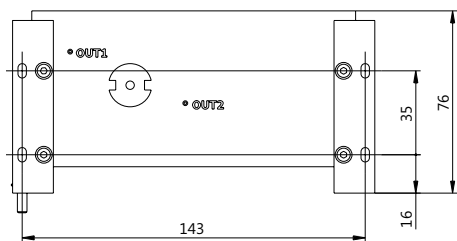
DPB series driver mounted with HV power supply PS-5

- HV pulse amplitude up to 5.6 kV
- HV pulse amplitude doubling layout
- Repetition rate up to 10 kHz
- Easy integration with HV power supply

SPECIFICATIONS

Catalogue Number	DPB-10-4.2	DPB-5-5.6
Maximum high voltage (HV) pulse amplitude to cell	4.2 kV	5.6 kV
Output polarity	bipolar	
HV pulse rise time, typical	6.5 ns	7.5 ns
HV pulse fall time, typical	6.5 ns	7.5 ns
HV pulse duration	120-3000 ns	
Maximal HV pulse repetition rate	10 kHz	5 kHz
External triggering pulse duration requirement (for DPB-10-4.2D & DPB-5-5.6D – controlled by two sync pulses)	> 50 ns	
External triggering pulse amplitude requirement	3-5 V (50 Ω load)	
External triggering pulse rise & fall time	< 20 ns	
HV pulse delay	40 ns	
External powering requirements:		
HV power supply*	≤2.1 kV, 5W	≤ 2.8 kV, 5 W
low voltage DC supply	14-25 V, < 150 mA (0.5 A inrush current). Optionally 12 V, 220 mA (0.5 A inrush current)	14-25 V, < 150 mA (0.5 A inrush current)
Dimensions (L x W x H):		
driver board	135 x 70 x 25 mm	
driver board mounted with PS-5 power supply	135 x 70 x 55 mm	

* Typical voltage control limits for PS-5 are 1.8 to 2.8 kV. We accept other limits on your request.



Outline drawing

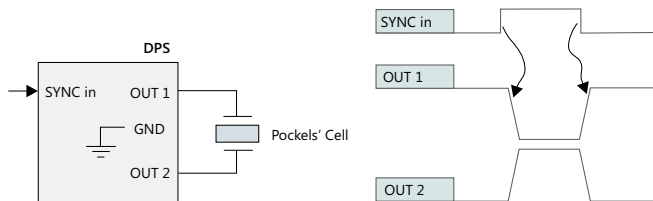


Diagram of pockels cell connection to driver and timing charts of driver controlled by 1 sync pulse DPB-10-4.2S or DPB-5-5.6S

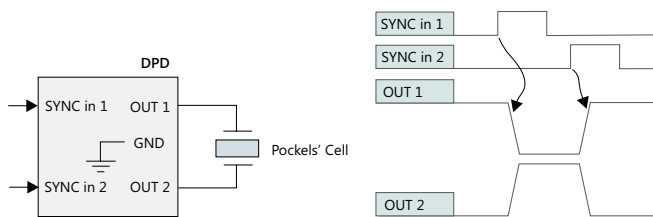


Diagram of pockels cell connection to driver and timing charts of driver controlled by 2 sync pulses DPB-10-4.2D or DPB-5-5.6D

ORDERING INFORMATION

Catalogue Number	Description
DPB-5-5.6S	Controlled by 1 sync pulse; Maximal HV pulse amplitude to cell 5.6 kV; Maximal HV pulse repetition rate 5 kHz
DPB-5-5.6D	Controlled by 2 sync pulses; Maximal HV pulse amplitude to cell 5.6 kV; Maximal HV pulse repetition rate 5 kHz
DPB-10-4.2S	Controlled by 1 sync pulse; Maximal HV pulse amplitude to cell 4.2 kV; Maximal HV pulse repetition rate 10 kHz
DPB-10-4.2D	Controlled by 2 sync pulses; Maximal HV pulse amplitude to cell 4.2 kV; Maximal HV pulse repetition rate 10 kHz