

PCD-UHV SERIES OEM POCKELS CELL DRIVER



PCD-UHV driver mounted with HV power supply **HV05Wm**

FEATURES

- ▶ HV pulse amplitude up to **5.6 kV**
- ▶ HV repetition rate up to **10 kHz**
- ▶ HV pulse duration down to **15 ns**
- ▶ HV pulse amplitude doubling layout
- ▶ Easy integration with HV power supply
- ▶ Switchable one/two trigger pulses control mode

SPECIFICATIONS

Operation regime	4.2 kV mode	5.6 kV mode
High voltage (HV) pulse amplitude to cell	4.2 kV	5.6 kV
Output polarity	bipolar	
HV pulse rise time, typical	7 ns	8 ns
HV pulse fall time, typical	7 ns	8 ns
HV pulse duration	30–3000 ns	
Maximal HV pulse repetition rate	10 kHz	5 kHz
External triggering pulse amplitude requirement	3.5–5 V (50 Ω load)	
External triggering pulse rise & fall time	< 5 ns	
HV pulse delay	30 ns	
External powering requirements:		
HV power supply *	≤ 2.1 kV, 5W	≤ 2.8 kV, 5 W
low voltage DC supply, switchable	15–25 V, 150 mA or 12 V, 220 mA (0.5 A inrush current)	
Dimensions (L × W × H):		
driver board	135 × 65 × 25 mm	
driver board mounted with HV05Wm power supply	135 × 65 × 55 mm	

* Typical voltage control limits for HV05Wm are 1.8 to 2.8 kV. Other limits are available on your request.

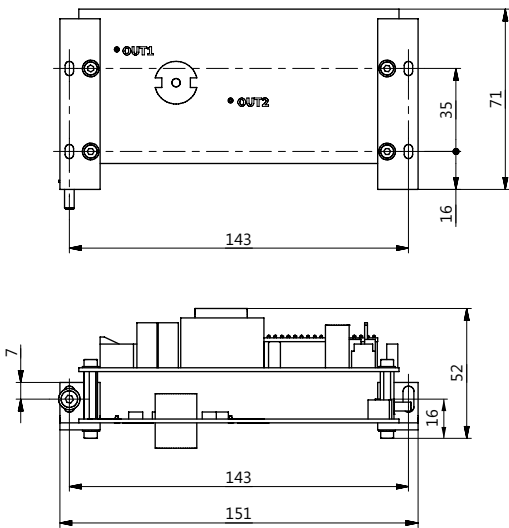


Fig. 1. Outline drawing of PCD-UHV

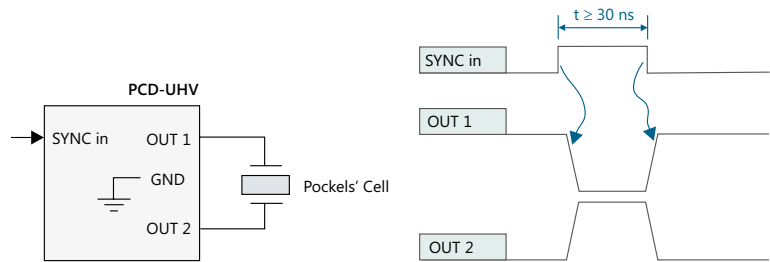


Fig. 2. Diagram of Pockels' cell connection to driver and timing charts for one-pulse control mode

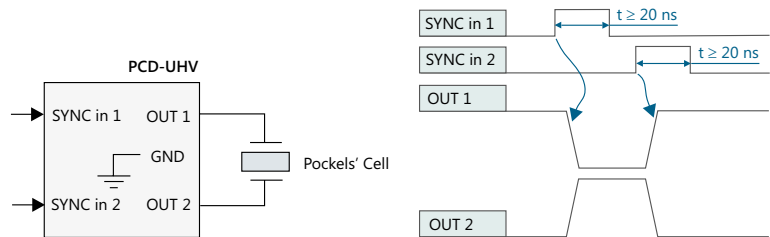


Fig. 3. Diagram of Pockels' cell connection to driver and timing charts for two pulses control mode