

OEM HV POWER SUPPLIES FOR POCKELS CELL DRIVERS

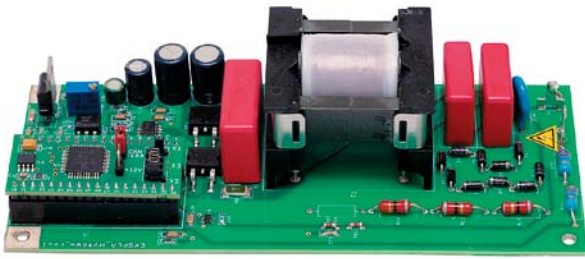


Fig.1. HV40Wm power supply

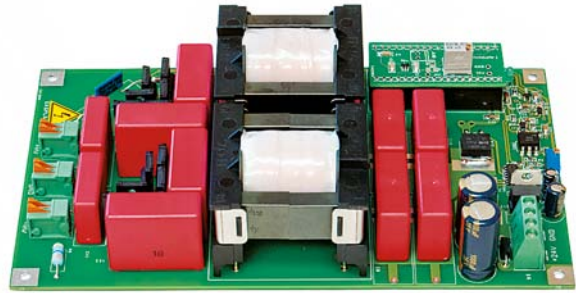


Fig.2. HV120Wm, HV2x60Wm power supply

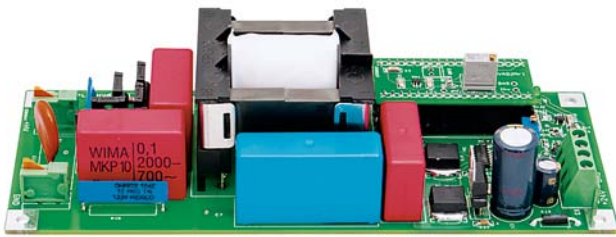


Fig.3. HV80Wm power supply

Power supply HVxxWm series is designed for powering pockels cell driver with appropriate power and voltage requirement. Due to its performance and reliable design, HVxxWm is good choice for OEM customers.

Table below shows general specifications of HV power supplies. Particularly "Maximal output high voltage" row gives reference of maximal achievable voltage for particular model limited by design. For specific driver this limitation is different. E.g. for the driver PCD-UHR1-1000-1.8 voltage control limits are made from 0.8 kV to 1.8 kV typically.

SPECIFICATIONS

| Model | HV05Wm | HV40Wm | HV80Wm | HV120Wm | HV2x60Wm |
|--------------------------------------------------------------|------------------------------------------------|------------------------------------------------|----------------------------------------------------------|--------------------------------------|--------------------|
| Maximal high voltage output options ¹⁾ | 1.8 kV 2.8 kV 4.0 kV | 1.3 kV 1.8 kV 2.5 kV 3.6 kV 4.0 kV | 1.8 kV 2.6 kV 3.1 kV 3.6 kV 4.0 kV 4.4 kV | 1.8 kV 2.6 kV 3.1 kV 3.6 kV | ±1.4 kV ±2.6 kV |
| Voltage control limits | -1 kV from maximal value | | | | |
| Maximal output power at maximal output voltage ²⁾ | 5 W | 40 W | 80 W | 120 W | 2×60 W |
| Output voltage control options ³⁾ | CAN interface ⁴⁾ , internal trimmer | | | | |
| External powering | 24 V DC, <15 W ⁵⁾ | 24 V DC, <50 W | 24 V DC, <90 W | 24 V DC, <150 W | 24 V DC, <150 W |
| Dimensions (L × W × H) | 135 × 70 × 30 mm | 160 × 70 × 40 mm | 175 × 70 × 45 mm | 175 × 110 × 45 mm | 175 × 110 × 45 mm |
| Mounting holes Ø3.4 mm location | 125 × 35 mm | 150 × 60 mm | 165 × 60 mm | 165 × 100 mm | 165 × 100 mm |

¹⁾ Matching to Pockels cell driver voltage requirement is necessary by ordering.

²⁾ Maximal power is proportionally lower by tuning to lower HV output.

³⁾ Needs to be indicated by ordering.

⁴⁾ Requires USB-CAN converter for computer control that sold separately.

⁵⁾ Optionally 12 V DC, <15 W.

Output ripple is 0.5% typically at maximal power for all models of HV power supplies. External filter can be used to reduce that value if certain application requires smoother output. All Pockels cell drivers made by Ekspla have integrated ripple filter and usually do not require additional one. Contact Ekspla for suggestions if your specific application needs lower ripple voltage.