

SDS HIGH VOLTAGE is a French company offering a broad range of OEM miniature high-voltage DC/DC converters. SDS HIGH VOLTAGE designs and manufactures its products, which come in micro-sized metal PCB mount enclosures. Input voltages range from 5, 12, 15, or 24 Vdc, with output voltages ranging from 100V to 6kVdc. Some feature adjustable output voltages through a setpoint voltage, while others are unregulated, with output voltage proportional to the input voltage.

These products are engineered and manufactured to be used in a wide array of activities where reliability, functionality, and space efficiency are guaranteed to meet our customers satisfaction. SDS HIGH VOLTAGE leverages its technical expertise and experience to provide tailored solutions to customers in the industrial, medical, military, research, and aerospace sectors.

## MICRO-SIZE DC/DC CONVERTERS

### μPRV SERIES – Surface mount, 0.5inch<sup>3</sup>, isolated, proportional high voltage DC/DC converter



The μPRV series is a range of SMD mount, isolated proportional DC/DC converters rated to 1.25W. Output voltage up to 500Vdc. Low noise (quasi-sinus resonant) , high efficiency (80% typ)



Product	Description	Input voltage	Output voltage	Output power	Polarity
μPRV series	Proportional converters (2 models)	0.7V to 24Vdc	100/150/200/280/500 vdc (+ other o/p voltage on demand)	Up to 1.5 W	Configurable

### PRV SERIES – PCB mount regulated proportional high voltage DC/DC



The PRV series is a range of PCB mount, isolated proportional DC/DC converters rated to 6W. Output voltage up to 4kVdc. Low noise (quasi-sinus resonant) , high efficiency (75% typ.). Centre tap outputs. Enable input. Over voltage input protected. Thermal shutdown protection. Status logical output.

Product	Description	Input voltage	Output voltage	Output power	Polarity
PRV series	Proportional converters (6 models)	2.5 to 15Vdc	1/2/4kV (+ other o/p voltage on demand)	Up to 6W	Configurable, center-tap

**μAPD SERIES – PCB mount regulated high voltage DC/DC converters**



The μAPD series is a range of PCB mount regulated DC/DC converters rated to 0.1W. Output voltage up to 100Vdc.  
Low noise (0,025%).

Product	Description	Input voltage	Output voltage	Output power	Polarity
APD series	Regulated converters (4 models)	5/12Vdc	100V	Up to 100mW	Fixed, positive or negative

**APD SERIES – PCB mount regulated high voltage DC/DC converters**



The APD series is a range of PCB mount regulated DC/DC converters rated to 0.1W. Output voltage up to 100Vdc.  
Low noise (0,001%). Flying lead in option.

Product	Description	Input voltage	Output voltage	Output power	Polarity
APD series	Regulated converters (64 models)	5/12Vdc	200/300/400/500Vdc	Up to 100mW	Fixed, positive or negative

**E-APD SERIES – PCB mount regulated high voltage DC/DC converters**



The E-APD series is a range of PCB mount regulated DC/DC converters rated to 0.1W. Output voltage up to 500Vdc. Voltage monitor. Very Low noise (HF<1mVpp, LF<3mVpp). Current monitor resolution <100nA  
Tight dynamic regulation. These converters are recommended for APD biasing.



Product	Description	Input voltage	Output voltage	Output power	Polarity
E-APD series	Regulated converters (3 models)	5/12Vdc	40/55/400Vdc (+ other o/p voltage on demand)	Up to 100mW	Fixed, positive or negative

**MTV SERIES – PCB mount regulated high voltage DC/DC converters**



The MTV series is a range of PCB mount regulated DC/DC converters rated to 1W. Recommended for PMTs biasing. Output voltage up to 1500Vdc. **Reduced ground footprint.** Voltage monitor. Embedded voltage reference. Low noise (0,001%). Flying lead in option.

Product	Description	Input voltage	Output voltage	Output power	Polarity
MTV series	Regulated converters (96 models)	12/15/24Vdc	600/1000/1250/1500Vdc	Up to 100mW	Fixed, positive or negative

**MTM SERIES – PCB mount regulated high voltage DC/DC converters**



The MTM series is a range of PCB mount regulated DC/DC converters rated to 1W. Recommended for PMTs biasing. Output voltage up to 1500Vdc. **Low profile.** Voltage monitor. Embedded voltage reference. Low noise (0,001%). Flying lead in option.

Product	Description	Input voltage	Output voltage	Output power	Polarity
MTM series	Regulated converters (96 models)	12/15/24Vdc	600/1000/1250/1500Vdc	Up to 100mW	Fixed, positive or negative

**WRV SERIES – PCB mount regulated high voltage DC/DC converters**



The WRV series is a range of PCB mount regulated DC/DC converters rated to 1W. These converters use a high frequency PWM regulator, which allows for larges input voltage ranges. So, versatile power sources like batteries and solar cells can be use without the need for a pre-regulator. **Reduced ground footprint.** Voltage & current monitors. Embedded voltage reference. Enable input. Low noise (0,001%). Flying lead in option.

Product	Description	Input voltage	Output voltage	Output power	Polarity
WRV series	Regulated converters (36 models)	5/12/24Vdc	1/2/3kV	1W	Fixed, positive or negative

**WRM SERIES – PCB mount regulated high voltage DC/DC converters**



The WRM series is a range of PCB mount regulated DC/DC converters rated to 1W. These converters use a high frequency PWM regulator, which allows for larges input voltage ranges. So, versatile power sources like batteries and solar cells can be use without the need for a pre-regulator. **Low profile.** Voltage & current monitors. Embedded voltage reference. Enable input. Low noise (0,001%). Flying lead in option.

Product	Description	Input voltage	Output voltage	Outut power	Polarity
WRM series	Regulated converters (36 models)	5/12/24Vdc	1/2/3kV	1W	Fixed, positive or negative

**DA SERIES – PCB mount regulated high voltage DC/DC converters**



The DA series is a range of PCB mount regulated DC/DC converters rated to up to 4W. These converters are recommended for photonic detector or other scientific equipment were low noise and stability are key factors. Voltage & current monitors. Enable input. Low noise (0,001%).

Product	Description	Input voltage	Output voltage	Outut power	Polarity
DA series	Regulated converters (72 models)	15/24Vdc	1/2/4/kV	Up to 4W	Fixed, positive or negative

**DE SERIES – PCB mount regulated high voltage DC/DC converters**



The DE series is a range of PCB mount regulated DC/DC converters rated to up to 6W. These converters are recommended for photonic detector or other scientific equipment were low noise and stability are key factors. Voltage & current monitors. Enable input. Low noise (0,001%).

Product	Description	Input voltage	Output voltage	Outut power	Polarity
DE series	Regulated converters (56 models)	15/24Vdc	1/2/4/6kV	Up to 6W	Fixecd positive or negative

**CAP SERIES – PCB mount high voltage capacitor charger**



The CAP series is a range of PCB mount regulated DC/DC converters dedicated to the capacitor charging. These converters are regulated current source until the programmed voltage is reached. Their control loop has been specially designed to work stable on capacitive load, hence they are not recommended for using on pure resistive loads. The output is referenced to the ground (not floated).

Product	Description	Input voltage	Output voltage	Output power	Polarity
CAP series	Cap charger ( 3 models)	24Vdc	1/2/4kV	4J/s	Fixed, positive

**SA SERIES – Photomultiplier socket assemblies**



The SA series is a collection of OEM photomultiplier socket assemblies which incorporate the high voltage power supply and the voltage resistor dividers biasing for the dynodes of the dedicated PMT. The user adjusts the HV tension using a setpoint tension.

Product	Description	Input voltage	Output voltage	DIAMETER	Connector	Polarity
SA-1	For Hamamastu™ R1635	15Vdc	1kV	10mm (3/8 inch)	E678-11N	negative
SA-2	For Hamamastu™ R7899	12Vdc	1.5kV	25mm (1 inch)	E678-14C	negative
SA-3	For Hamamastu™ R6231	12Vdc	1.5kV	51mm (2 inch)	E678-14W	negative