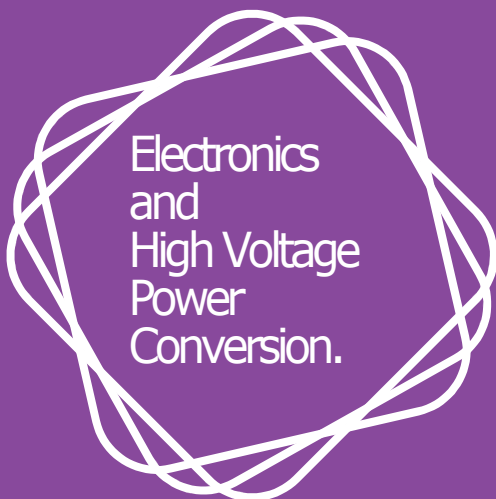
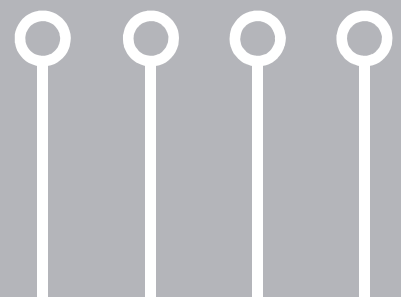


Systems Development & Solutions



Electronics  
and  
High Voltage  
Power  
Conversion.

[www.sdshv.com](http://www.sdshv.com)



SDS Systems Development & Solutions is a French company, committed to serving its customers to the development of durable relationships that are founded on our promise to continually strive to meet the needs of their customers, for quality High Voltage Power Supply equipment.

SDS offers a wide array of devices with multiple configurations ranging from 100V to 25kV, with a maximum power output of 100W, as well as the remote command and control boards used to drive them.

These products are designed and manufactured to be used in a wide array of professional domains where reliability, functionality, space saving and cost-effectiveness are essential to our customers' success.

Customers that depend on our products work in domains including:

- light detection using photo-electronic detectors such as Photo Multiplier Tubes (PMT), semiconductor detectors such as Avalanche Photo Diodes (APD) or Multi-Pixel Photon Counters (MPPC), hybrid photo detectors (HPD) or light intensification systems like Micro Channel Plates (MCP)
- electro -optically Q-switched lasers with Pockels Cells
- capacitor charging applications

From off-the-shelf products to custom designed components, SDS is dedicated to providing you with the right solution at the right price. Look inside for general information on our product line and, to learn more about SDS, please visit our website at [www.sdshv.com](http://www.sdshv.com).

SDS is also the exclusive distributor for France of UltraVolt, Inc, the world-leading manufacturer of high voltage power supplies and systems.

For further information, or speak to a sales representative, please call us on +33 (0)1 43 97 65 04

or contact us by e-mail at [info@sdshv.com](mailto:info@sdshv.com)

### Miniature PCB-mountable High Voltage Power Supplies for OEM applications



This category of low-cost, miniature DC-DC high voltage power supply units is designed for very tight space requirements. Self-contained in compact and lightweight resin enclosures, all 9 product types in this category are mounted directly on the circuit board and, depending on the model, generate reduced power of up to 15W.

They are powered by 5, 12, 15 or 24Vdc and generate up to 8kVdc in output power which is easily verified via the external voltage output power monitoring signal. Standard features include extremely reduced low line and load regulation, low ripple, high stability, and continuous short circuit protection.

Product	Input voltage	Output voltage	Output power	Available configurations
Micro APD Series	5Vdc	0 to 100V	100mW	4 standard products
APD Series	5Vdc, 12Vdc or 15Vdc	0 to 200V / 0 to 500V	100mW	64 standard products
HPD Series	5Vdc	0 to -8000V	400mW	1 standard product
MT Series	12Vdc, 15Vdc or 24Vdc	0 to 600V / 0 to 1500V	up to 1W	80 standard products
MTA Series	5Vdc, 12Vdc or 24Vdc	0 to 3000V	Up to 1W	36 standard products
DA Series	15Vdc or 24Vdc	0 to 1000V / 0 to 4000V	1W to 4W	64 standard products
MAF-10/MAF-100 Series	24Vdc	0 to +4000V	Charging power 4J/s	2 standard products
DE Series	15Vdc or 24Vdc	0 to 1000V / 0 to 4000V	6W	56 standard products
		0 to 6000V	1W to 6W	
FBA Series	24Vdc	0 to 300V / 0 to 400V	15W	8 standard products

### Complete socket assemblies for photomultiplier tubes



SDS manufactures complete power bases upon request to match the photomultipliers of tube diameters of 25mm (1 inch), 28mm (1 1/8 inch), and 51mm (2 inch).

For an easy use of photomultiplier tubes, SDS designs socket assemblies consisting of a high quality socket, a voltage divider circuit, and a high voltage converter integrated into a compact and lightweight housing. They operate from 5, 12, 15 or 24Vdc inputs, providing single outputs of up to 3000Vdc.

The voltage-divider network is designed according to the application measurement or counting. Voltage monitoring is available upon request. These products are fully encapsulated. Different power base designs are possible according to the types of photomultipliers and their mode of operation.

Product	Description	Input voltage	Output	Output power	Available
FPB Series	Compact photomultiplier power base incorporating an SDS high voltage supply and a voltage divider	5Vdc, 12Vdc,, 15Vdc or 24Vdc	0 to 100V / 0 to 3000V	0.24W to 6W	Custom design solutions upon request

## Micro Channel Plate Power Supply



The MCP series is a compact high-voltage power supply unit for low impedance Micro channel plates that features a resistive anode readout and exceptional stability up to 10ppm/°C over a -55°C/95°C range. The switching of the cathode power supply is controlled by the anode current adjustable discriminator.

Product	Description	MCP voltage & load	Cathode	Anode/screen
MCP Series	Ultra Compact high voltage DC-DC power supply with adjustable output voltage and protections for MCP based devices	1 kV / min. 30 MΩ	Voltage: -300V rise and fall time:: < 100μs	Voltage: up to 5kV Current: up to 4μA

## Single Channel High Voltage Power System



The LBT Series houses a HV converter which belongs to our miniature pcb-mountable dc-dc converters' family. With UltraVolt' HVPS up to 30W systems are also available. AC powered on the universal voltage range, this power supply provides exceptional flexibility in output voltage and polarity depending on the model. This unit operates in either local or remote mode, and is easily controlled via a serial Port or an off-site host bus adapter allowing for the use of various protocols. .

Product	Description	Input voltage	Output voltage	Output power	Available configurations
LBT Series	Low-power bench top power supply	Universal 85-264Vac	0 to 100V / 0 to 8000V	0.1W to 6W	268 standard SDS products

## Non-instrumented high-voltage power supplies in block configuration



This category of compact, modular, DC-DC and DC-AC high-voltage power supplies is designed to meet the needs of instrumentation manufacturers where cost and space restrictions are important. Depending on the model, the 4 product types in this category deliver output power that can reach up to 35W. They are powered at 24Vdc and can generate from one to three high-voltage outputs reaching up to 25kVdc. Each model can be internally or externally programmed and output voltage can be displayed on an external power output display unit. Standard features include extremely reduced low line and load regulation, low ripple, high stability, and continuous short-circuit protection.

Product	Description	Input	Output voltage	Output power	Available configurations
CCPS Series	Capacitor charging module	24Vdc	+2500V to +25kV	Chargin poxer 25J/s	1 standard model
CAM Series	Power supply with high level of EMC	24Vdc	0 to -15kV	7.5W	1 standard model
TS Series	Triple output DC/ AC high-voltage power supply	24Vdc	Vout 1: +6500V Vout 2: -8500kV Vout 3: 4600Vrms	Pout 1: 6.5W Pout 2: 24W Pout 3: 4.5W	1 standard model
Depollution Series	Single output DC/ AC high-voltage power supply	24Vdc	3300Vrms	3.3W	2 standard products
			5000Vrms	5W	

## High-voltage pulse generators



SDS high-voltage pulse generators, based on field-effect transistor technology, provide the remarkable feature of being introducible into lightweight and reduced-size obstruction cases. GIPO generators can produce pulses up to 5.5kV, with a rise time of just a few nanoseconds (generally 2.5ns), with an adjustable pulse length as short as 200ns and as long as 30μs for charge capacitive loads. The GIPO is available either in block configuration or as a stand-alone unit.

Product	Description	Input voltage	Output voltage	Pulse rising edge	Available configurations
GIPO Series*	High voltage pulse generator (block configuration)	24Vdc	-500V to -5.5kV	2.5ns typical on a load of 2pF	1 standard model
GIPO-SAU Series*	Stand-alone unit containing either 1 or 2 GIPOs	24Vdc or universal 85-264Vac	-500V to -5.5kV	2.5ns typical on a load of 2pF	2 standard products

# UltraVolt's Products

SDS is the exclusive distributor for France of UltraVolt, Inc, the world-leading manufacturer of high voltage power supplies and systems. Founded in 1990, Ultravolt has taken advantage of over 35 years of experience in the military and aerospace marketplace.

UltraVolt's product line includes models from 0 to 62V to 0 to 50kV at output power from 0 to 100mW through 0 to 250W.

## STANDARD SINGLE OUTPUT MODULES

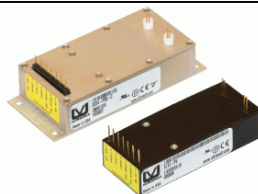
### A SERIES And AA SERIES

A Series and AA series provide 0 to 62V through 0 to 6kV at 0 to 4W and 0 to 30W in only 70.5cc (A Series) and 54.8cc (AA Series)



### HIGH POWER C SERIES

Our High Power C Series units extend the 0 to 125V through 0 to 6kV C Series to 60W, 125W, or 250W.



### C SERIES

C Series models are designed for fast rise time capacitor charging applications from 0 to 62V through 0 to 6kV at 20W or 30W.



### 10A-25A SERIES and 30A-40A SERIES

10A-40A Series extends the A Series to 0 to 10kV through 0 to 40kV with the same 4W to 30W power output.



### HIGH POWER 8C-30C SERIES

High Power 8C-30C Series of high power density high voltage power supplies provide 0 to 8kV through 0 to 30kV at 60W & 125W.



### CP SERIES

CP Series has the unique capability of operating in constant voltage, constant-current, or constant-power modes. Outputs range from 0 to 15kV at 10W of output power.



## PRECISION HVPS

### E SERIES

E Series operates from 0 to 1kV through 0 to 15kV at 4W, 15/20W or 30W. This series offers PPM level temperature coefficients, line and load regulation, and ripple.



## HV AMPLIFIERS

### HVA SERIES

HVA Series high voltage amplifier line can both source and sink current. Bipolar models available at 0 to  $\pm 5$ kV at 1W; unipolar modules available at 0 to 10kV at 1W.



## MULTI-OUTPUT HVPS

### BIPOLAR HIGH POWER C SERIES

Bipolar High Power C Series units feature dual independent HV outputs from 0 to  $\pm 125$ Vdc through 0 to  $\pm 6$ kV at 0 to 125W (62W x 2) and 250W (125W x 2).



## ISOLATED LVPS

### FL SERIES and EFL SERIES

FL and EFL Series provide floating LV power supplies with isolated controls, allowing HV power supplies, filaments, and electronics to operate while floating on up to 15kV. The EFL Series provides two precision analog channels and improved faraday shielding.



## FILAMENT SUPPLIES

### FIL SERIES

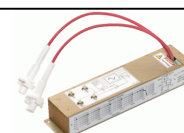
FIL Series is a precision, center-tapped, non-isolated low-voltage filament supply rated for 0 to 5VDC at 0 to 3 Amps. It offers excellent linearity and accuracy of control, allowing users to properly operate the filament to maximize performance and life.



## TEST FIXTURES

### TF SERIES

Our TF Series of test fixtures provides convenient inline measurement of HV power supplies and HV system performance in only 454.74cc. When coupled with an oscilloscope or conventional meter it becomes a standalone test fixture, which can measure ripple, noise, pulses, absolute DC, DC stability, DC line regulation, DC load regulation, and more.



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