

**CCPS Series**  
**Capacitor charging supply**  
custom product

Reference: **CCPS24P253202**  
Vin : **24Vdc**  
Vout : **+2.5kV to +25kV**  
Charging Power : **25J/s**



CCPS24P253202 model


This range of high voltage power supplies is used to charge capacitors at constant current levels. They provide highly reliable outputs and can be fitted in blocks with inputs and outputs only or made into stand alone units that can be controlled either manually or through remote controls. SDS' capacitor charging high voltage power supplies are fitted with automatic protection against overload, short circuit and arc. As an example, the characteristics of a 25kV 25J/s Power Supply, model reference CCPS24P253202, is given below.

- output voltages to +25kV
- low profile
- tight line regulation
- block configuration
- lightweight
- protection against overload, short circuit and arc

Specifications of the CCPS24P253202 model	
Input voltage Vin	from 23Vdc to 30Vdc
Output voltage Vout	from +2500V to +25000V
Output current Iout	2mA at full voltage
Load capacitance Cload	nominal 1µF
Charge time	13s maximum with 1µF
Average power	8W maximum
Output voltage setting	via external voltage source 0/+10V
Output current setting	via external voltage source 0/+10V
Line regulation	better than 100ppm/V of full output voltage over specified input voltage range
Minimum capacitive load	150nF (with maximum resistive load of 40MΩ)
Polarity	fixed positive
Residual ripple	n.a.
HV monitoring	analogue 0/+10V output signal 1V/2500V
HV current monitoring	analogue 0/+10V output signal 1V/200µA
Thermal drift	100ppm/°C (higher stability on request)
Operating temperature	0°C to +40°C
Storage temperature	-10°C to +70°C
Safeguards	arc and short circuit protection

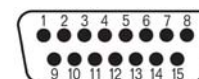
Mechanical Configuration	
Insulation	silicon resin
Case material	silver anodised aluminium box
Dimensions	L160 x W108.5 x H30 mm
Setting and monitoring input	through male Sub-D 15 pins
Line input	n.a.
High voltage output	shielded coaxial cable, length 1m
Fixation	n.a.

**Marking**

MADE IN FRANCE	CE	<b>CCPS Series Capacitor Charging</b>			
		<b>CCPS24P253202</b>			
		<b>Serial N°: 09074454</b>			
		<b>25KV = 2mA 25 J/s</b>			
5 Bdv de Créteil 94100 St Maur des Fossés France Tel: 33 (0) 1 43 97 65 04 http://www.sdshv.com	1- 0V signal 2- reserved 3- voltage monitoring 4- enable 5- interlock	6- supply 0V 7- supply +24V 8- supply +24V 9- control input 10- 10V reference	11- current monitoring 12- reserved 13- reserved 14- current limit output 15- supply +24V		

**Connector's Pin-Out**

- |                    |                          |
|--------------------|--------------------------|
| Inhibition input : | 4. inhibit               |
| HV setting :       | 2. current control input |
| HV monitoring :    | 9. voltage control input |
|                    | 3. voltage monitoring    |
|                    | 11. current monitoring   |
|                    | 1. 0V signal             |
| Current limit :    | 14. Current limit output |
| Interlock :        | 5. 24V available output  |
| Reference :        | 10. reference 10V        |
| Non connected :    | 12. NC                   |
|                    | 13. NC                   |
| HV output :        | coaxial cable Vout       |



SUB-D MALE 15P

- Line input : pin 6, 7 : 0V supply  
pin 8, 15 : +24V Vin