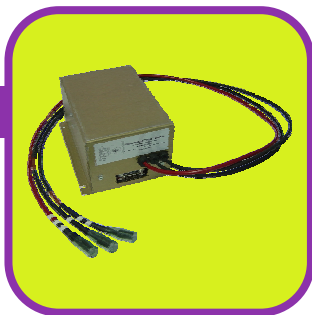


TS Series

Compact and modular triple output DC-AC high voltage power supply for Corona wire polarisation



SYSTEMS DEVELOPMENT
& SOLUTIONS



1 standard product

Reference: TS24P652102N852282-462102

Vin : 24Vdc

Vout1: +6500V

Iout1: 1.0mA

Vout2: -8500V

Iout2: 2.8mA

Vout3: 4600Vrms

Iout3: 1.0mA

This space-saving regulated high voltage converter is suitable for depollution applications in a laser printer using corona discharges.

- block configuration
- 3 output sources
- voltage and current monitoring
- protection against overload, short circuit and arc

Global product	
Parameters	Specifications
Input voltage Vin	24Vdc $\pm 2V$
Current consumption	<3A, the three sources used at their nominal functioning
Output voltage stability	$\pm 5\%$ for $22 < V_{in} < 26$ Volts
Temperature range	from 15°C to 50°C
Humidity	from 20% to 80% relative humidity
Safeguards	<ul style="list-style-type: none"> ▪ soft start ▪ arc and short circuit protection ▪ protected towards polarity inversion ▪ protected against overshoot and over voltage
Compliance with norms	<ul style="list-style-type: none"> ▪ IEC ▪ CSA 22.2 – 950

First Source: positive continuous voltage U+ [+6500V, 1.0mA]	
Parameters	Specifications
HV output Vout	adjustable from 4000V to 6500V
Output voltage setting ratio	1V for 1000V using an external voltage source ; input impedance: 1M Ω
Output current Iout	1mA nominal
Output voltage monitoring ratio	+1V for 1000V, accuracy $\pm 2\%$; output impedance: 1k Ω
Output current monitoring ratio	+1V for 1mA, accuracy $\pm 2\%$; output impedance: 1k Ω
Short circuit nominal current	<1.2mA
Residual ripple	<2% peak to peak at full load when measured at nominal current

Second Source: negative continuous voltage U- [-8500V, 2.8mA]	
Parameters	Specifications
HV output Vout	adjustable from -5500V to -8500V
Output voltage setting ratio	-1V for -1000V using an external voltage source ; input impedance: 1M Ω
Output current Iout	2.8mA nominal
Output voltage monitoring ratio	-1V for -1000V, accuracy $\pm 2\%$; output impedance: 1k Ω
Output current monitoring ratio	-1V for 1mA, accuracy $\pm 2\%$; output impedance: 1k Ω
Short circuit nominal current	<3mA
Residual ripple	<2% peak to peak at full load when measured at nominal current

Third Source: quasi-sinusoidal alternative voltage U~ [4600Vrms, 1mA, 250Hz]	
Parameters	Specifications
HV output Vout	adjustable from 2500V to 4600V
Output voltage setting	1Vdc for 1000Vrms on the 2500-4600Vrms range, using an external voltage source ; input impedance: 1M Ω
Output current Iout	1mA, 250Hz nominal
Output voltage monitoring ratio	1Vrms for 1000Vrms, accuracy $\pm 5\%$; output impedance: 1k Ω
Output current monitoring ratio	none
Output frequency	250Hz typical
Output frequency setting	none

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Mechanical configuration	
Insulation	high voltage assembly entirely potted in an silicon resin
Casing material and finish	aluminium case with SURTEC 650 finish
Dimensions	L180 x W120 x H90 mm ; add totally 16mm width for the mounting brackets
Input/output connections for high voltage, setting and monitoring	through a Sub-D 9 male plug
High voltage output connectors	3 high voltage shielded coaxial cables, length: 1.2m each
Mounting	flanged enclosure with 4 fixing holes

Other output voltages and output currents are available upon request. Do not hesitate to ask us about any parameter you would like to see changed for your application.

