

Excellence in High Voltage KS Series Data Sheet

KS005P, KS005N, KS010P, KS010N
KS020P, KS020N, KS030P & KS030N

GENERAL PURPOSE HIGH VOLTAGE MODULES

Applications:

Monitor CRT

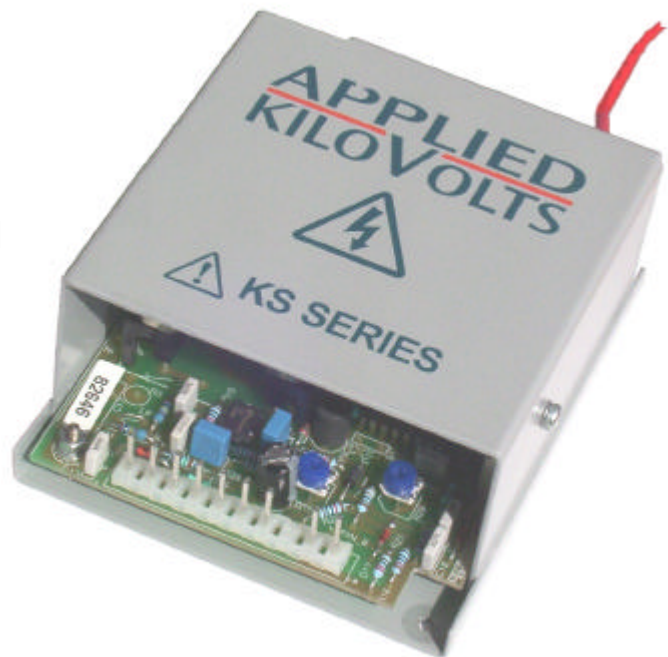
Lens voltages

Focus and high voltage bias

Ion pumps

Image intensifiers

- 5kV, 10kV, 20kV & 30kV
 - High frequency switch mode
 - Internal control or externally programmable
 - Short circuit and flashover proof
 - 24 hour burn in
 - General purpose
-



These stabilised miniature power supplies are available in either positive or negative polarity at output voltages of 5kV, 10kV, 20kV and 30kV. They are intended for cathode ray tube and general purpose applications and the output voltage can be controlled by internal or external potentiometers or by an external 10 volt analogue control voltage. The units are pin compatible with the high precision HP series and the 100 Watt HW series of power supplies (please see separate data sheets).

All units are short circuit proof and use high frequency switching techniques, in conjunction with a ferrite step-up transformer to control the output. All high voltage components are vacuum encapsulated in silicon rubber.

Please contact us to discuss special versions of these units.

ELECTRICAL SPECIFICATION

UNIT TYPE	POLARITY	OUTPUT	RIPPLE AT FULL LOAD
KS005PAA300	POSITIVE	50 volts to 5kV at 1mA	Better than 0.02% peak to peak
KS005NAA300	NEGATIVE		
KS010PAA300	POSITIVE	100 volts to 10kV at 0.5mA	
KS010NAA300	NEGATIVE		
KS020PAA300	POSITIVE	250 volts to 20kV at 0.2mA	
KS020NAA300	NEGATIVE		
KS030PAA300	POSITIVE	500 volts to 30kV at 0.1 mA	
KS030NAA300	NEGATIVE		

INPUT VOLTAGE: -	+24 volt d.c. $\pm 10\%$ at 0.5A. Negative input terminal common to HV earth return.
OUTPUT VOLTAGE: -	See table above.
LINE REGULATION: -	Less than 0.1% for input changes of 1 volt.
LOAD REGULATION: -	Less than 0.1% for load changes from 10% to full load. (Measured at maximum voltage).
OVERLOAD PROTECTION: -	Flashover and short circuit proof.
TEMP CO-EFFICIENT: -	300ppm/ °C or better.
CONTROL: -	<ul style="list-style-type: none"> INTERNAL potentiometer. EXTERNAL potentiometer 10V analogue signal. (0 to +10V gives zero to maximum output, tolerance $\pm 2\%$). Input impedance nominally 200Kohm.
READOUT: -	Voltage monitor 0 to +10V represents zero to maximum output, tolerance $\pm 3\%$ (Source resistance 10 kohm). Current monitor (stack return type) optional on all units .
OPERATING TEMP: -	0 °C to +45 °C
STORAGE TEMP: -	-35 °C to +85 °C
R.F.I.: -	Choke input filter. Steel case for low radiated magnetic field.
Safety:	Complies with EN61010 Part 1.

Mechanical Specification

Size:	115 x 98 x 47mm.
Fixings:	M3 clearance holes. Bracket AK20035 available for end mounting.
Output:	By 0.5 metre of URM43 screened (shielded) cable (KS030P & N by 0.7 metre of TV30).
Weight:	0.65kg.
Input Connector:	Molex 10 pin (mating connector supplied).

Order Code:	Series Code	o/p kV	Polarity	Options Code	Temp Co
	KS	005= 5kV	P= +ve	AA= no options	300
		010= 10kV	N= -ve	IS = Stack Return Current Monitor	
		020= 20kV			
		030= 30kV			
e.g	+10kV KS series with Stack Return Current Monitor: KS010PIS300				