

## Technical Data

NUCLEONIX offers a standard **High Voltage Unit** Type **HV502** which is a compact STANDARD/NIM Module (2 bit). This is designed to meet the full HV bias requirement for a broad range of Nuclear radiation detectors like G.M. detectors, ionization chambers, scintillation detectors, photo multiplier tubes, etc,. Apart from this range of applications it also can be used as a high voltage source in areas where high degree of regulation, stability and accuracy are required. Output indication has been provided on a 3 ½ DPM and can be varied by ten turn helipot.

### FEATURES :

- (0-2000V) @ 1mA, continuously adjustable High Voltage output.
- Indication on 3 ½ LED DPM.
- Ripple & noise less than 10mV (rms).
- Regulation better than 0.05% of full scale.
- Two bit module.

## SPECIFICATIONS

### Output voltage :

0V to 2000V continuously variable by a ten turn helipot provided on front panel. (All specifications are valid from 10V to 2000V).

### Output indication :

Provided on a 3 1/2 digit LED, DPM.

### Output connector :

MHV Socket (by default)  
UHF Socket (if specified)

### Output current :

It can deliver upto a maximum of 1mA.

### Output polarity :

The unit is offered with a choice of both POSITIVE or NEGATIVE POLARITY selectable by reversing a polarity connector. (Provided inside).

### Line & load regulation :

Better than 0.5% of full scale.

### Ripple :

Less than 10mV (rms) peak to peak.

### Protections :

Indefinite protection against overload and short circuit . Under overload the unit doesn't meet the specifications whereas on removal of short circuit it will recover by itself.

### Power requirement :

Draws power from a standard BIN / NIM Power Supply or MINIBIN power supply.

+24V at 250mA

+12V at 50mA

-12V at 50mA

### Linearity :

Better than +/- 0.2%

### Temperature stability :

Better than 100 PPM.

### Mechanical dimensions :

Standard 2 bit.

### Rear module connector :

Amphenol connector Type:26-159-24P-H (24 pin type) by default or NIM standard connector as per AEC specifications TID 20893 (Rev) Type : AMP 2041865 optional.

