

HIGH VOLTAGE UNIT

TYPE : HV 503

Technical Data

NUCLEONIX offers a standard **High Voltage Unit** Type **HV503**, which is a compact STANDARD/NIM Module (2bit). This is designed to meet the full HV bias requirement for a broad range of Nuclear radiation detectors like GM detectors, ionization chambers, scintillation detectors, photomultiplier tubes, X-ray proportional detectors 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 precision ten turn graduated dial and output can be varied by ten turn helipot.

FEATURES :

- (0-3000V) @ 1mA, continuously adjustable High Voltage output.
- HV Indication by ten turn precision dial.
- Ripple & noise less than 10mV (rms).
- Regulation better than 0.05% of full scale.
- Two bit module.

SPECIFICATIONS**Output voltage :**

0V to 3000V continuously variable by a ten turn helipot provided on front panel. (All specifications are valid from 10V to 3000V).

Output indication :

Provided on a precision ten turn graduated dial.

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 PCB. (Provided inside).

Line & load regulation : Better than 0.05% 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.

