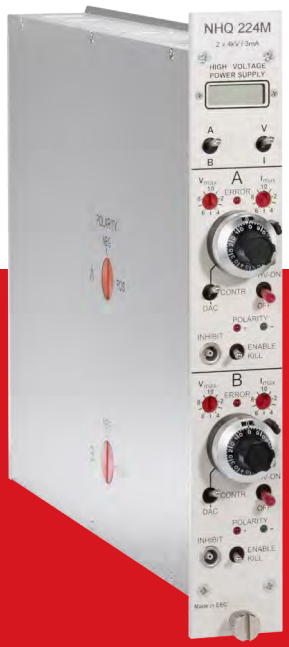
ELECTRONIC TEST & POWER SYSTEMS

HTP-NHQ

HIGH PRECISION DUAL CHANNEL NIM CASSETTE



POSITIVE PROBLEM SOLVING

The HTP-NHQ is a dual channel high voltage PSUs built to the NIM format. Each channel can be adjusted independently.

The unit is often found in sensing and detection systems where low noise and high stability are paramount. Typical applications include medical, nuclear and particle physics along with vacuum technology. The output polarity can be switched and the voltage ramp time adjusted via computer interface after switch on. The unit features recessed 10 position limit switches for both voltage and current. These can be set to help protect sensitive loads against accidental user error.

- High Voltage Power Supply in 1/12 NIM Standard Cassette
- Two Independently Controllable Channels
- Remote Control via CAN Interface
- Adjustable Voltage Ramp
- Switchable Polarity

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FURTHER DETAILS

This high precision unit offers superior current resolution into the nano-amp and pico-amp ranges with excellent stability. A 'Kill' feature can also be enabled so that the output will automatically switch off when a preset current limit is reached. The 'inhibit' socket allows an external TTL signal to be used to switch the output OFF/ON.

A CAN interface is provided for remote control of the unit. The interface provides full adjustment of the current limit. A windows based GUI is available for operating the unit from a PC. An OPC system with integrated OPC server is available to aid integration in to larger systems. LabVIEW drivers are also available along with C++ and DLL files.

SELECTION TABLE

Part Number	Output Voltage	Output Current	Max Power (Each Channel)	Interface Type	Number of Channels
HTP-NHQ 246L	0 - 6kV	0 - 1mA	6W	CAN	Dual

TECHNICAL DATA

GENERAL	
Ripple & Noise	$5mV_{p-p}$
Resolution of Voltage Measurement (Display)	1V
Resolution of Voltage Measurement (via Interface)	100mV
Resolution of Current Measurement (Display)	1nA
Resolution of Current Measurement (via Interface)	100pA
Voltage Accuracy (for One Year)	± (0.05% V_O + 0.02% V_{OMAX} + 1 digit)
Current Accuracy (for One Year)	± (0.05% I_O + 0.02% of range + 1 digit)
Stability (ΔV_O / ΔV_{IN})	< $3 \times 10^{-5} \times V_{OMAX}$
Stability Load, No Load (ΔV_O)	< $5 \times 10^{-5} \times V_{OMAX}$
Temperature Coefficient	< 3×10^{-5}/K
LCD Display	4 digit for voltage or current (selectable)
Voltage Setting	Manual: 10 turn potentiometer DAC: via interface (selectable)
Ramp Speed at HV On/Off	Hardware ramp: 500V/s
Ramp Speed via Interface	Software ramp: 2 - 255V/s
Protection	Separate current & voltage limit, INHIBIT, current trip
INHIBIT	Per channel (TTL Low)
Power Requirements V_{IN}	±24VDC (<800mA single ch. <400mA) ±6V(<100mA)(option /N24 without 6V)
Output Polarity	Switchable
Connector	SHV

Every effort is made to ensure that the information provided within this technical summary is accurate. However, ETPS Ltd must reserve the right to make changes to the published specifications without prior notice. Where certain operating parameters are critical for your application we advise that they be confirmed at the time of order. ETPS Ltd specialises in modifying its proven platforms to suit your needs. Please contact our office if your requirement is non-standard. Please note that your actual unit may differ from those shown.

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