

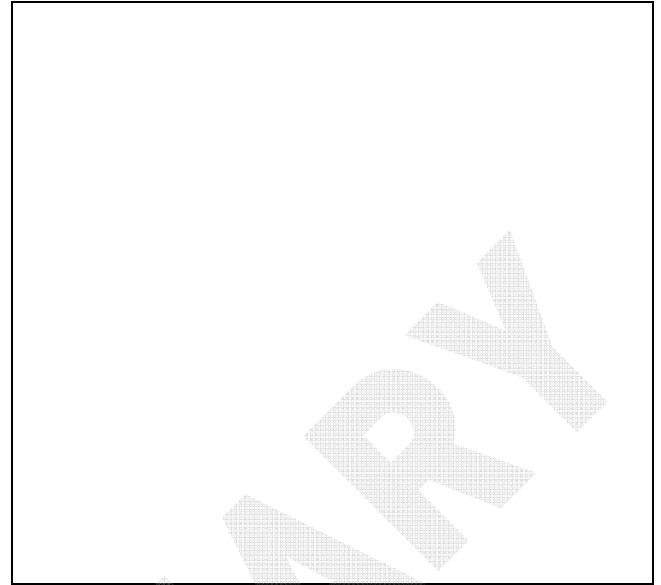
±1250V, ±2mA PRECISION HIGH VOLTAGE AMPLIFIER MODULE

■ FEATURES

- ±1250V / ±2mA
- High Precision, High Stability
- Low Noise
- High Speed
- Inhibit Input
- V/I Monitor Outputs
- Local High Voltage Generation
- Interlock Input

■ APPLICATIONS

- Electrostatic Deflection
- EAP
- Mirror Deflection / Deforming
- Electrophoresis
- Ion Beam Deflection
- Electro Optics
- MEMS
- Mass Spectrometry
- High Voltage Testing



The **HA1.25B2-S** is a high precision high voltage amplifier 3U / 6HP / 220mm plug-in card. It provides output voltages between -1250V and +1250V at ±2mA. The amplifier output is available via an SHV connector located on the front panel.

Signal gain is 125, the input voltage range is ±10V. The amplifier features high precision, very high stability, high speed as well as very low ripple and noise.

The output voltage can be controlled by means of a differential setpoint input. The amplifier is equipped with a voltage and current monitor and a TTL compatible INHIBIT input.

The amplifier output is protected against overcurrent, short circuit, overvoltage and high voltage flashover / arc.

External supply voltage is +24V. The high voltage generator is part of the module.

A safety interlock circuit is provided to integrate the unit into an emergency shutdown circuit. When the interlock loop is open, the internal high voltage sources are being shut down.

■ TECHNICAL DATA

Output Voltage:	-1250V ... +1250V, bipolar
Output Current:	±2mA
Full Power Bandwidth:	DC ... >4kHz @ C _L =0 DC ... >1kHz @ C _L =200pF
Small Signal Bandwidth:	DC ... >10kHz @ C _L =200pF
Control Input:	±10V (10V ≅ 1250V), BNC, R _i = 50kΩ
DC Gain:	125 ±0,2%
Temperature Coefficient:	typ. 10ppm/K
Load Regulation:	< 50ppm
Ripple / Noise:	< 30mV _{PP} / < 4mV _{RMS} @ C _L =200pF
Monitor Output (V):	±10V (10V ≅ 1250V), BNC
Monitor Output (I):	±10V (10V ≅ 2mA), BNC
INHIBIT Input:	TTL compatible, BNC
Output Connector:	SHV
Supply Voltage:	+24V _{DC} ±10%
Ambient Temperature:	Operation: 0 - +40°C Storage: -25 - +70°C
Dimensions:	3U x 6HP x 220mm