

H31010 High Voltage Amplifier

Innovation & Ingenuity, for World-Class Products

- ✓ **HV Amplification:** $\pm 10\text{KV}$ (20KVpp)
- ✓ **Powerful Output:** $\pm 10\text{mA}$,100W(across full band)
- ✓ **Large Signal Bandwidth:** DC-6kHz



H31010

Huatek **H31010** is an outstanding desktop high voltage amplifier.

H31010 not only has variable digital gain and offset adjustment, it also has a unique transient protection mode (Hiccup) with auto-recovery from a fault. It's excellent performance and form factor can be applied in various high voltage scenarios.

Features

Digital Gain

- ✓ 0-2000,0.1 step

Ensured Rated Output Across Full Band with Effective Compensation

- ✓ Max $\pm 10\text{V}$ input
- ✓ Gain 0-2000 adjustable, 0.1 step

Build-in DC HV Source

- ✓ $\pm 10\text{KV}$, 1V step, digital adjustment
- ✓ Use as DC Source separately, or offset of AC output

Monitor

- ✓ Voltage Monitor, Current Monitor

Intelligent Protection

- ✓ Overload, Short Circuit
- ✓ Single Mode, Hiccup Mode (Auto-Recovery)
- ✓ One-key lock

Intelligent Cooling

- ✓ On Demand Air cooling
- ✓ Low Noise; ensuring component and circuit long term reliability

Control

- ✓ USB (TYPE C) , easy for control and integration

LCD Display

- ✓ voltage, protection, gain

Typical Applications

- Piezoelectric and MEMs
- Nano technology and Microfluidics
- Electron and Magnetic field drives
- Transducer
- Electroluminescence
- Plasma excitation
- Material Science
- HV insulation cable test
- Power electronics
- Electrohydraulic Printing (EHD)
- Dielectric Elastomers
- Electrostatic research
- Electroluminescence

Specifications

| | | | |
|-------------------------------------|------------------------------------|---|--|
| Max. Output Voltage | ±10kV(20kVp-p) | Voltage Monitor | 1V/2000V |
| Max. Output Current | ±10mA, across full frequency range | Current Monitor | 500mV/mA |
| Peak Output Power | 100W | V/I Monitor | 50Ω |
| Output Impedance | 1KΩ | Output Impedance | 50Ω |
| HV Output Connector | 4mm HVconnector | V/I Monitor | BNC |
| Large Signal Bandwidth(-3dB) | DC-6kHz | Output Connector | BNC |
| Small Signal Bandwidth(-3dB) | DC-30kHz | THD | - |
| Slew Rate | >267V/us | Communication Interface | USB-C |
| Voltage Gain | 0-2000.0, 0.1 step | Power Supply | AC 220V |
| DC Voltage Source | ±10KV, 1V step | Operating Environment | 0~45 °C/≤ 85% RH Non condensation /Altitude up to 2000 meters |
| Response Time | - | Stability | Non-cumulative drift:<50ppm/h Temperature-drift: 100ppm/°C 23°C±3°C, preheating for 30min |
| Zero Drift | <±400mV | Dimensions (exclude protrusions) | 133mm*330mm*440 (H*W*D) |
| Max. Input Voltage | ±10V | Weight | 15Kg |
| Input Impedance | 10KΩ | | |
| Input Connector | BNC | | |
| Output Protection | Overload, Short Circuit | | |
| Protection Mode | Singel, Hiccup (Auto Recovery) | | |

Configurations

Included in Standard Shipment

amplifier*1、manual*1、HV output Cable*1、BNC-BNC cable*3、Power line*1、Type-C cable*1

Optional Accessories

HV attenuation probe、customized made HV output cable (available in various length)

