

# H31513 High Voltage Amplifier

Innovation & Ingenuity, for World-Class Products

- ✓ **HV Amplification:**  $\pm 15\text{KV}$ (30KVpp)
- ✓ **Powerful Output:**  $\pm 13.4\text{mA}$  ,200W(across full band)
- ✓ **Large Signal Bandwidth:** DC-15kHz



**H31513**

Huatek **H31513** is an outstanding desktop high voltage amplifier. It can be easily deployed in equipment as OEM module or used as desktop instrument.

**H31513** 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

- ✓ 0-1600 0.1 step

### Ensured Rated Output Across Full Band with Effective Compensation

- ✓ Max  $\pm 10\text{V}$  input
- ✓ Gain 0-1600 adjustable, 0.1 step

### Build-in DC HV Source

- ✓  $\pm 15\text{KV}$ , 2V 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

<b>Max. Output Voltage</b>	±15kV(30kVp-p)
<b>Max. Output Current</b>	±13.4mA, across full frequency range
<b>Peak Output Power</b>	200W
<b>Output Impedance</b>	1KΩ
<b>HV Output Connector</b>	4mm HVconnector
<b>Large Signal Bandwidth(-3dB)</b>	DC-15kHz
<b>Small Signal Bandwidth(-3dB)</b>	DC-75kHz
<b>Slew Rate</b>	>1000V/us
<b>Voltage Gain</b>	0-1600.0, 0.1 step
<b>DC Voltage Source</b>	±10KV, 1V step
<b>Response Time</b>	-
<b>Zero Drift</b>	<±1V
<b>Max. Input Voltage</b>	±10V
<b>Input Impedance</b>	10KΩ
<b>Input Connector</b>	BNC
<b>Output Protection</b>	Overload, Short Circuit
<b>Protection Mode</b>	Singel, Hiccup (Auto Recovery)

<b>Voltage Monitor</b>	1V/2000V
<b>Current Monitor</b>	500mV/mA
<b>V/I Monitor</b>	50Ω
<b>Output Impedance</b>	50Ω
<b>V/I Monitor</b>	BNC
<b>Output Connector</b>	BNC
<b>THD</b>	-
<b>Communication Interface</b>	USB-C
<b>Power Supply</b>	AC 220V
<b>Operating Environment</b>	0~45 °C/≤ 85% RH Non condensation /Altitude up to 2000 meters
<b>Stability</b>	Non-cumulative drift:<50ppm/h Temperature-drift: 100ppm/°C 23°C±3°C, preheating for 30min
<b>Dimensions (exclude protrusions)</b>	267mm*460mm*580 (H*W*D)
<b>Weight</b>	18Kg

## 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)

