

HUATEK 20KV Voltage Amplifier

Innovation & Ingenuity, for World-Class Products

- ✓ **HV Amplification:** $\pm 20\text{KV(KVpp)}$
- ✓ **Powerful Output:** $\pm 20\text{mA}$,400W(across full band)
- ✓ **Large Signal Bandwidth:** DC-10kHz



20KV Series

Huatek H32020 is an outstanding desktop high voltage amplifier. It can be easily deployed in equipment as OEM module or used as desktop instrument.

H32020 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

- ✓ 0-2200 0.1 step

Ensured Rated Output Across Full Band with Effective Compensation

- ✓ Max $\pm 10\text{V}$ input
- ✓ Gain 0-2200 adjustable, 0.1 step

Build-in DC HV Source

- ✓ $\pm 20\text{KV}$, 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

Model	H32010A	H32010B	H32020
Max. Output Voltage	±20kV(40KVpp)		
Max. Output Current	±10mA		±20mA
Peak Output Power	200Wp		400Wp
Output Impedance	1kΩ		
HV Output Connector	4mm HV Connector		
Large Signal Bandwidth (-3dB)	DC~6KHz	DC~10kHz	DC~7.5kHz
Small Signal Bandwidth (-3dB)	DC~30KHz	DC-50KHz	DC-37.5KHz
Slew Rate	>533V/us/	>889V/us	>667V/us
Voltage Gain	0~2200.0/0.1 step		
Max. Input Voltage	±10V		
Input Impedance	10kΩ		
Input Connector	BNC		
Voltage Monitor	1V/2000V		
Current Monitor	500mV/mA		200mV/mA
V/I Monitor Impedance	50Ω		
V/I Monitor Output Connector	BNC		
Output Protection	Overload protection, Short protection		
Protection Mode	Single protection, Hiccup protection		
Communication Interface	USB-C		
DC Voltage Source	± 20KV,2V step		
TTL Connector (Enable)	BNC		
Operating Environment	0~45 °C/≤ 85% RH Non condensation /Altitude up to 2000 meters		
Stability	Non-cumulative drift:<50ppm/h Temperature-drift: 100ppm/°C 23°C±3°C, preheating for 30min		
Power Supply	AC100~240V50/60Hz		
Dimensions (exclude protrusions)	442mm*223mm*580mm		480mm ×279mm ×630mm

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)

