HUATEK 20KV Voltage Amplifier

Innovation & Ingenuity, for World-Class Products

✓ **HV Amplification：** ±20KV(KVpp)

✓ **Powerful Output：** ±20mA ,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.

H32020not 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 ±10V input

✓ Gain 0-2200 adjustable, 0.1 step

Build-in DC HV Source

✓ ±20KV，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	H32020HS
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~7.5kH	DC~10kHz
Small Signal Bandwidth (-3dB)	DC~30KHz	DC-50KHz	DC-37.5KHz	DC-50kHz
Slew Rate	＞533V/us/	＞889V/us	＞667V/us	＞889V/us
Voltage Gain	0~2200.0/0.1 step			
THD	<1%@1kHz，80％ Rated Voltage			
DC Voltage Source	±20KV,2V step			
Max. Input Voltage	±10V			
Max. Input Voltage	10kΩ			
Input Connector	BNC			
Voltage Monitor	1V/2000V			
Current Monitor	500mV/mA		200mV/mA	
Current Monitor	50Ω			
V/I Monitor Output Connector	BNC			
Output Protection	Overload protection，Short protection			
Protection Mode	Single protection，Hiccup protection			
Communication	USB-C			
TTL Connector（Enable）	BNC			
Operating Environment	0~45 ℃/≤ 85% RH Non condensation /Altitude up to 2000 meters			
Stability	Non-cumulative drift:<50ppm/h Temperature-drift: 100ppm/℃ 23℃±3℃, preheating for 30min			
Power Supply	AC100~240V50/60Hz			
Dimensions（H*W*D）	223mm*442mm*580mm		279mm*480mm*630mm630mm	

Configurations

Included in Standard Shipment	Optional Accessories
amplifier*1、manual*1、HV output Cable*1、BNC-BNC cable*3、Power line*1、Type-C cable*1	HV attenuation probe、customized made HV output cable (available in various length)

