

H20414D High Voltage Amplifier(Differential Output)

Innovation & Ingenuity, for World-Class Products

- ✓ **HV Amplification:** $\pm 400\text{V}$ (800Vp-p)
- ✓ **Powerful Output:** $\pm 140\text{mA}$, 56W (across full band)
- ✓ **Large Signal Bandwidth:** DC-500KHz



H20414D

Huatek H20414D is an outstanding desktop high voltage amplifier. The chassis is made of high strength aluminum, providing high portability and durability. It can be easily deployed in equipment as OEM module or used as desktop instrument.

H20414D 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

Highly Compact and Small

- ✓ <2U(4.45cm) height

Digital Gain

- ✓ 0-100.0, 0.1 step

Ensured Rated Output Across Full Band with Effective Compensation

- ✓ Max $\pm 10\text{V}$ input
- ✓ Gain 0-100.0 adjustable, 0.1 step

Build-in DC HV Source

- ✓ $\pm 400\text{V}$, 1V step, digital adjustment
- ✓ Use as DC Source separately, or offset of AC output

Monitor

- ✓ Voltage 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	±400V(800Vp-p)
Max. Output Current	±140mA, across full frequency range
Peak Output Power	56W
Output Impedance	100Ω
HV Output Connector	SHV
Large Signal Bandwidth(-3dB)	DC-500KHz
Small Signal Bandwidth(-3dB)	DC-2.5MHZ
Slew Rate	>889V/us
Voltage Gain	0-100.0, 0.1 step
DC Voltage Source	±400V, 1V step
Response Time	-
Zero Drift	<±100mV
Max. Input Voltage	±10V
Input Impedance	10KΩ
Input Connector	BNC
Output Protection	Overload, Short Circuit
Protection Mode	Singel, Hiccup (Auto Recovery)

Voltage Monitor	1V/100V
Current Monitor	-
V/I Monitor	50Ω
Output Impedance	
V/I Monitor	BNC
Output Connector	
THD	-
Communication Interface	USB-C
Power Supply	DC 24V/5A
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
Dimensions (exclude protrusions)	75*205*330mm (H*W*D)
Weight	3.5Kg

Configurations

Included in Standard Shipment

amplifier*1、 manual*1、 HV output Cable*1、 BNC-BNC cable*3、 AC-DC adaptor*1、 Type-C cable*1、 carry case*1

Optional Accessories

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