

H21505 High Voltage Amplifier

Innovation & Ingenuity, for World-Class Products

- ✓ **HV Amplification:** $\pm 1500\text{V}$ (3000Vp-p)
- ✓ **Powerful Output:** $\pm 50\text{mA}$, 75W (across full band)
- ✓ **Large Signal Bandwidth:** DC-100kHz



H21505

Huatek H21505 is an outstanding desktop high voltage amplifier. It is only 1U(4.45cm) high and one A4 paper size. 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.

H21505 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

- ✓ 1U(4.45cm) height, A4 paper size

Digital Gain

- ✓ 0-300.0, 0.1 step

Ensured Rated Output Across Full Band with Effective Compensation

- ✓ Max $\pm 10\text{V}$ input
- ✓ Gain 0-300.0 adjustable, 0.1 step

Build-in DC HV Source

- ✓ $\pm 1500\text{V}$, 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	±1.5kV(3kVp-p)	Voltage Monitor	1V/300V
Max. Output Current	±50mA, across full frequency range	Current Monitor	50mV/mA
Peak Output Power	75W	V/I Monitor	50Ω
Output Impedance	100Ω	Output Impedance	50Ω
HV Output Connector	4mm HV Connector	V/I Monitor	BNC
Large Signal Bandwidth(-3dB)	DC-100kHz	Output Connector	BNC
Small Signal Bandwidth(-3dB)	DC-500kHz	THD	-
Slew Rate	>667V/us	Communication Interface	USB-C
Voltage Gain	0-300.0, 0.1 step	Power Supply	AC220V
DC Voltage Source	±1500V, 1V step	Operating Environment	0~45 °C/≤ 85% RH Non condensation /Altitude up to 2000 meters
Response Time	<2.5μs	Stability	Non-cumulative drift:<50ppm/h Temperature-drift: 100ppm/°C 23°C±3°C, preheating for 30min
Zero Drift	<±100mV	Dimensions (exclude protrusions)	133*340*460 (H*W*D)
Max. Input Voltage	±10V	Weight	约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、 AC-DC adaptor*1、 Type-C cable

Optional Accessories

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