High Voltage Amplifiers HVA

Up to 5 channels, 1 MHz bandwidth

IMRA America offers a compact, high voltage amplifier with ultra-low noise performance optimized for PZT and EOM control for precision frequency metrology. The HVA is compatible with the IMRA ULC lock box, allowing for convenient phase control of frequency combs with a feedback bandwidth up to 1 MHz. Includes customer interface and provisions for remote control via PC with several user-selectable modulation functions.

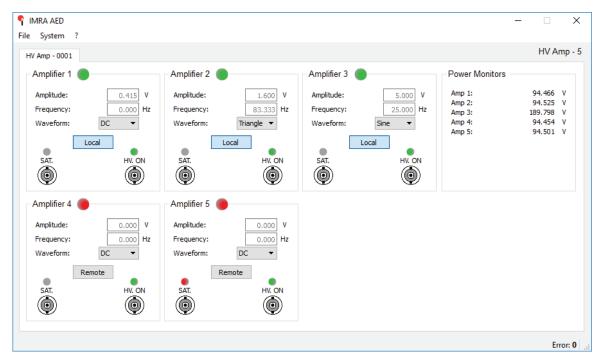
Features

- Modular system with up to 5 channels
- 80 V or 180 V output voltage
- 500 kHz full power bandwidth
- EOM and PZT driving capabilities
- Both hardware and software knob for offset adjustment
- Output modulation up to 125 Hz (sine, triangle, saw tooth, square)
- Software interface for offset adjustment, modulation settings, and saturation monitor





HVA Specifications and Configurations	
Number of Channels	1, 2, 3, 4, 5
Channel Bandwidth: Large Signal (Full Swing) Small Signal	> 500 kHz on 120 pF load > 1 MHz
Channel Modulation: Waveform Frequency	Sine, saw tooth, triangle, square Up to 125 Hz
Output Voltage	80 V or 180 V
Gain	14 (80 V), 27 (180 V)
Output Current	50 mA max
Input Referred Noise	< 22 nV/sqrtHz @ 1 kHz
Output Voltage Noise	< 3.5 mVpp 100 Hz - 1 MHz
Input Voltage	+/- 3 V
System Size	19", 2U rack-mountable, 12" long
Power Consumption	< 50 W (5 channels configuration)



Software interface showing an HVA with 5 channels; channel 3 has the 180 V option. Channels 1, 2, and 3 in remote control with a DC offset, triangle waveform, and sine wave output respectively.



