

200 / 400 V Amplifier

The aixACCT High Voltage DC-stable power amplifier is designed to provide precise control of bipolar output voltages. It is available as a 200 V or 400 V output voltage. The 200 V version operates with an output voltage in the range of 0 to ± 200 V DC or peak AC. The 400 V version operates in the range of 0 to ± 400 V DC or peak AC. Applications for the High-Voltage Amplifier include AC and DC biasing for piezoelectric material characterization.

The High-Voltage Amplifier is configured as a non-inverting amplifier with a fixed gain of 40 V/V. Features include an all-solid-state design for a slew rate greater than 100 V/ μ s, a large signal bandwidth (-3dB) of DC to greater than 100 kHz. The active output stage sinks or sources current into small reactive or resistive loads throughout the output voltage range which is essential for achieving the accurate output responses and high slew rates demanded by reactive loads.

The voltage monitor provides low-voltage output signals for monitoring purposes. A Digital Enable feature provides a connection for a remote device to turn the high voltage on and off.



■ Technical Data

200 V version, values in brackets for 400 V version (factory set)

Power supply	AC 110 / 220 / 240 V, 50/60 Hz $\pm 10\%$, max. 110 W (factory set)
Fuse rating (2 pcs.)	500 mA T (slow blow) 220 / 240 V 5x20mm (1 A T for 110 V version)
Output voltage	max. ± 200 V (± 400 V)
Output current	± 100 mA (min. ± 50 mA)
Output resistance (approx.)	100 Ω
Power bandwidth (-3 dB)	min. 100 kHz , small signal min. 200 kHz
Slew rate	min. 100 V/ μ s
Input voltage	± 5 V (± 10 V)
Amplification	input impedance about 1 M Ω 40 V/V ± 0.2 %
Voltage monitor output	max. ± 5 V (± 10 V), 1/40th of output voltage at terminal ± 0.2 %, ± 5 mV, max. 5 mA output impedance approx. 1k Ω
Disable input	open or high level \rightarrow disable shorted or low level \rightarrow enable input impedance approx. 7 k Ω
Environment Conditions	0...40 $^{\circ}$ C, RH 0..60 % non-con densing, max height 2000 m above sea level, indoor use only, pollution category 1
Dimensions (approx.)	W 30 cm/ L 30 cm /H 20 cm
Weight (approx.)	9 kg