

Key Features & Benefits

Electronics

- Input voltage range ± 1 V up to ± 10 V, customer specified
- 8, 16, 24 or 32 output channels, customer specified
- Output voltage range ± 100 V
- Output voltage DC accuracy better than 0.1% of full scale
- Output current capacity ± 7 mA
- Voltage gain ratio from 10 to 100 V/V, customer specified
- Slew rate greater than 30 V/ μ s @ $C_L = 3.3$ pF
- Capacitive drive load of each individual channel up to 50 nF
- Maximum continuous power dissipation 25 W (32 channels)
- As a part of the Optonicus WACO Design Kit, provides input voltages for the WACO DM from WACO CU output controls
- Input power 60W, 100-240 VAC, 50-60 Hz

Mechanical

- 19" EIA rack mountable
- Height: 2U

WACO AM

High-Voltage Amplifier Stack

A stack of 8, 16, 24 or 32 high-voltage amplifiers for the 7, 16, or 31 actuator Optonicus WACO DM deformable mirror

The WACO AM is designed to provide accurate amplification of the WACO CU control voltages to drive the piezo-electric actuators of the WACO DM deformable mirror for precision mirror surface deformation, as well as for use with other devices demanding precision control. The stack of the WACO AM high-voltage amplifiers contains 8, 16, 24 or 32 amplifiers to suit different configurations of the WACO Design Kit components, or other needs.



WACO AM-16 (top), shown with WACO CU-16 (bottom)

Each amplifier receives a voltage input with a minimum range of ± 1 V and a maximum range of ± 10 V and generates an output voltage in the range of ± 100 V. Each amplifier in the WACO AM has a driving current capacity of ± 7 mA. The bandwidth of each amplifier channel is 20 kHz at capacitive load $C_L = 5.6$ nF, $V_{out} \pm 10$ V, and 4 kHz at capacitive load $C_L = 5.6$ nF, $V_{out} \pm 100$ V.