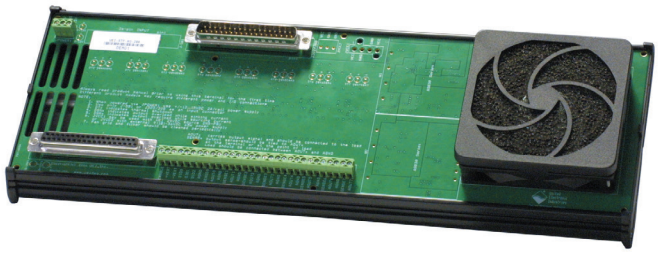
UEI-STP-AO-200

Unity Gain, 250 mA Current Buffer Board

- 250 mA per channel, continuous
- Resettable output fuse on each channel
- ±10 Volt output, minimum
- Direct connect cable to DNA-AO-308
- High Accuracy
- Wide power supply input range
- Drives capacitive and inductive loads



General Description:

The UEI-STP-AO-200 is a unity gain, high current output buffer board for use with DNA-AO-308 and PD2/PDXI series analog output devices. The unit provides continuous output currents of up to 250 mA on each of 8 channels up to a minumim output of ±10 Volts. 500 mA resettable fuses are provided on each output and the output buffers themselves are protected from thermal overload.

The board provides excellent gain and offset performance and is an ideal solution in applications requiring both high current and high accuracy. The 1 V/uS slew rate provide ensures the AO-200 is fast enough to keep up with almost all high current system requirements. The outputs are designed to drive capacitive and inductive loads and should be compatible with almost all systems, including those driving long distances of wire

The 37-pin D input to the AO-200 can be connected to the DNA-AO-308 board using a standard, straight connection 37-pin cable. PD2/PDXI series boards are connected to the unit via UEI's PD-5B-CONN interconnect boards.

A fan mounted on the unit assures the buffer stays within temperature limits. The fan is thermostatically controlled and turns on if the internal tempeature of the unit exceeds 45°C. Seperate LEDs illuminate to display over current conditions at approximately 280 mA. A third LED per channel illuminates to indicate the output buffer is in thermal overload.

The unit may be powered directly using ±13 to ±15 volt power supplies. The optional DC/DC converter allows the buffer to be powered by a single, unipolar supply from 9 to 36V.

The AO-200 is fully enclosed. Though there is no cover on the top of the unit, the top of the printed circuit board has no active signals exposed other than those on the various connectors and screw terminals.

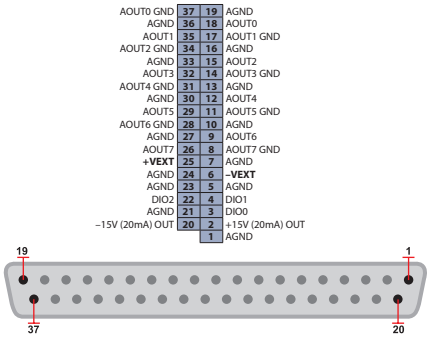
Technical Specifications:

Number of Channels	8
Gain	Unity gain (x 1)
Gain error	±0.2%, max
Offset error	±3 mV, max
Output slew rate	1 V/µS
Output current	250 mA, at ±10V, min
Output protection	500 mA, resettable fuse per channel
Output overload display	LEDs display current source/sink > 280 mA
Thermal overload	LED display of output buffer over temp
Input power required	±13 to ±15 V
Input power required with optional DC/DC	+9 to +36 VDC
Cooling	Fan based forced air cooling. Fan turns on when internal temperature exceeds 45°C.
Physical Dimensions	10.0" x 4.2" x 2.125"
Operating Temp. (tested)	0°C to +85°C
Storage Temp	-40°C to +85°C
Operating Humidity	5 - 90%, non-condensing

Output Pinout Diagram:

All outputs are also provide at screw terminals on the board

DB-37 (female)
37-pin Connector:



Ordering Guide:

Part Number	Description
UEI-STP-AO-200	Unity gain current buffer board
UEI-STP-AO-200D	Unity gain current buffer board with optional DC/DC converter