



ZENO® 3200 Analog I/O Expansion Board S1110Z

- Add up to a total of 140, 18-bit A/D channels
 - Excitation voltages provided
 - 3 types of grounds provided
- All expansion terminal blocks from the ZENO®
 - Add AC excitation or D/A output

The analog expansion board for the ZENO® 3200 adds much more than just an increased number of analog channels. The expansion board adds 32 single-ended channels or 16 differential channels at 18-bit resolution. One existing channel on the ZENO® 3200 is used, so with one expansion board the ZENO® 3200 will have 44 single-ended, fault-protected, analog channels at 18-bit A/D resolution. In addition, the expansion board provides 8 additional switched excitation lines for low power and multiple excitation voltage applications (1.25, 2.5, and 5 volt).

It is possible to stack two expansion boards inside the standard ZENO® 3200 housing. One or two more boards (for a total of 4) can be connected and placed in an expanded ZENO® housing. This means it is possible to have 44, or 76 channels with all the electronics inside the ZENO® 3200, and up to 140 channels with additional boards inside the expanded ZENO® 3200 housing.

Total Number of Channels with Added Expansion Boards

ZENO® 3200	18-Bit A/D	12-Bit
Standard ZENO®	14	2
1-Exp. Board	44	2
2-Exp. Board	76	2
3-Exp. Board	108	2
4-Exp. Board	140	2

If the ZENO® is fitted with a single expansion board, a plug-in terminal strip can be attached to the side of the

ZENO® housing. The terminal strip may be removed or replaced on the ZENO® without disconnecting wires from the sensors. If more than one expansion board is used, then the terminal blocks are mounted near, but not attached to the ZENO® housing. D-subminiature, 37-pin connectors located on the side of the ZENO® attach to cables that lead to the terminal strips. Again, these can be disconnected from the ZENO® without any need to remove wires connected to the terminal strips. This allows easy removal or replacement of the ZENO® without connecting and reconnecting the sensor wires.

Excitation Voltages: Eight switched excitation lines are provided for low power and multiple excitation voltage applications on each expansion board. The voltages can be set at 1.25, 2.5, and 5 volts. All excitation lines are software configurable by the user.

Ground Connections: Sixteen ground terminal connections per expansion board are provided. There are 3 types of grounds provided for maximum signal integrity and equipment protection from EMI, lightning, surge, etc.

Option

AC Excitation or D/A Conversion: It is possible to add one channel of AC excitation or one channel of D to A conversion. The D/A conversion is +5 to -5 volts with a resolution of 12-bits. AC excitation is square wave with user configurable amplitude from 0-10 V peak-to-peak and frequency adjustable from 0-5 kHz.