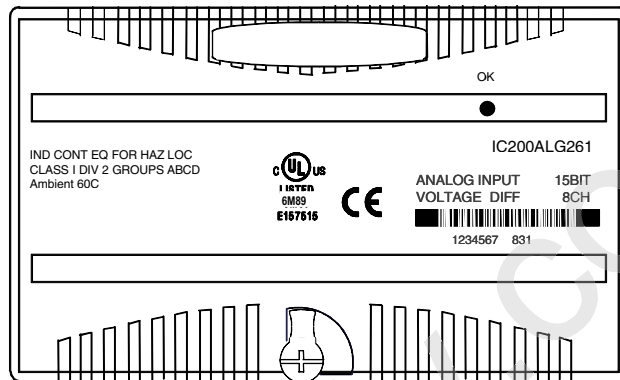


IC200ALG261 **Analog Input Module, 15 Bit Differential Voltage 8 Channels**

Analog input module IC200ALG261 provides an interface to 8 differential voltage inputs.



The module receives power from the backplane power supply. No external power source is required for module operation. Power for the user's transceivers must be supplied from an external source.

Intelligent processing for this module is performed by the CPU or NIU. The module provides 8 words of analog input data.

LED Indicators

The green OK LED is on when backplane power is present, internally generated field power is functioning properly, the module has been configured, and the module has been recognized on the backplane.

Diagnostics

The module reports a Loss of Internal Power fault for field-side circuits.

Configuration Parameters

None

IC200ALG261

Analog Input Module, 15 Bit Differential Voltage 8 Channels

Module Specifications

Module Characteristics	
Channels	8 differential, one group
Module ID	FFFFB008
Isolation: User input to logic (optical) and to frame ground	250VAC continuous; 1500VAC for 1 minute
Group to group	Not applicable
Channel to channel	None
LED indicators	OK LED indicates backplane power is present
Backplane current consumption	5V output: 200mA maximum
External power supply	None
Thermal derating	None
Configuration parameters	None
Diagnostics	Loss of Internal Power
Input Characteristics	
Input Voltage (Differential)	-10V to +10V
Input Voltage (Common Mode)	-10V to +10V
Input Impedance	100K ohms minimum
Accuracy (0V common mode): 25 degrees C* 0 to 60 degrees C	+/-0.3% typical of full scale, +/-0.5% maximum of full scale +/-1% maximum of full scale
Resolution	0.3125mV = 1 count
Common mode rejection	70db
Update rate per module	7.5ms
Compatibility	
VersaPro Software	Version 2.0 or higher
VersaMax PLC CPU Firmware	Version 2.10 or higher
VersaMax Ethernet NIU Firmware	Version 1.10 or higher
VersaMax DeviceNet, Profibus, or Genius NIU Firmware	Planned for future release

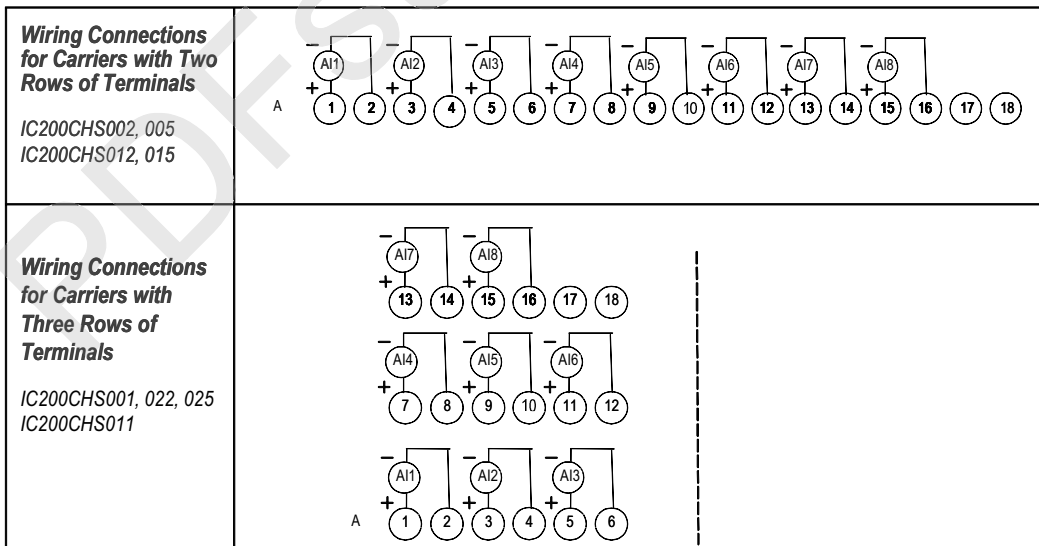
* In the presence of severe RF interference, (IEC 1000-4-3, 10V/m), accuracy may be degraded to +/-1%. Input accuracy may be degraded an additional +/-1% with the introduction of input common mode voltage.

IC200ALG261
Analog Input Module, 15 Bit Differential Voltage 8 Channels

Field Wiring

Terminal assignments for the module are shown below.

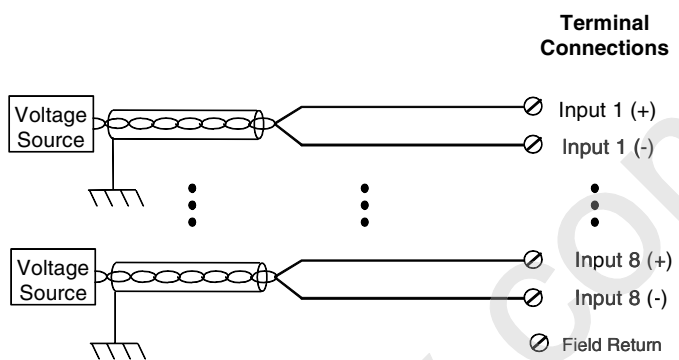
Number	Connection	Number	Connection
A1	Input 1 (+)	B1	No connection
A2	Input 1 (-)	B2	No connection
A3	Input 2 (+)	B3	No connection
A4	Input 2 (-)	B4	No connection
A5	Input 3 (+)	B5	No connection
A6	Input 3 (-)	B6	No connection
A7	Input 4 (+)	B7	No connection
A8	Input 4 (-)	B8	No connection
A9	Input 5 (+)	B9	No connection
A10	Input 5 (-)	B10	No connection
A11	Input 6 (+)	B11	No connection
A12	Input 6 (-)	B12	No connection
A13	Input 7 (+)	B13	No connection
A14	Input 7 (-)	B14	No connection
A15	Input 8 (+)	B15	No connection
A16	Input 8 (-)	B16	No connection
A17	Field Return	B17	No connection
A18	NC	B18	No connection



IC200ALG261

Analog Input Module, 15 Bit Differential Voltage 8 Channels

Wiring Examples



An external source must be provided to power input transceivers.

Cable Shield Connections

If possible, the cable should be grounded at the source device. If that is not possible, the cable shield must be grounded at the source device. If that is not possible, the cable shield must be grounded at the I/O module. This can be done using an Auxiliary I/O Terminal (IC200TBM001, 002, or 005).

If the module is installed on a Terminal-style I/O Carrier (IC200CHS001, 002, or 005), shield connections can be made on an Auxiliary I/O Terminal that is attached to the I/O carrier.

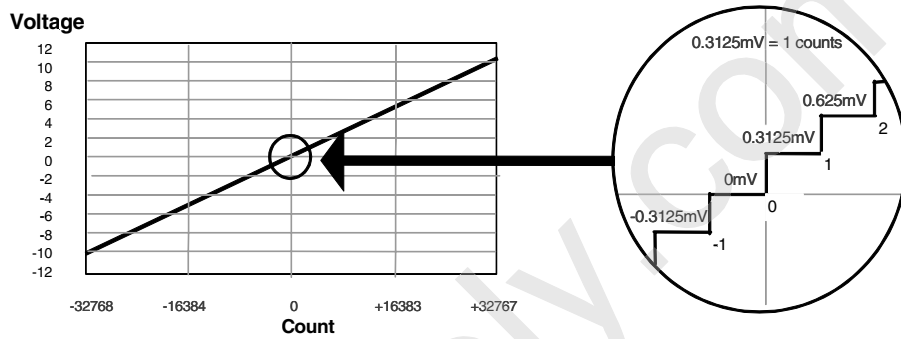
If the module is installed on a Compact Terminal-style I/O Carrier (IC200CHS022, 025), shield connections can be made on an Auxiliary I/O Terminal that is mounted near the I/O carrier. Be sure to ground the Auxiliary I/O Terminal Strip if you plan to use it for this purpose.

If the module is installed on a Connector-style I/O Carrier (IC200CHS003), the cable shield can be connected directly to an Interposing Terminal (IC200CHS011, 012, 015). Be sure to ground the Interposing Terminal. It is recommended to use a shielded interposing cable as well between the Interposing Terminal and the Connector Base. A custom shielded cable can be made using the Connector kit (IC200ACC302). In addition, a custom shield braid can be wrapped around standard Interposing Cables (IC200CBL105, 110, 120, 230). If this approach is used be sure to ground the braid.

IC200ALG261
Analog Input Module, 15 Bit Differential Voltage 8 Channels

Scaling

The graphs below show the relationship between the input voltage measured at the field terminals and the data that is output by the module.



The following equations can be used to calculate count values:

$$\text{Counts} = (\text{Input Voltage}) \times (32000 / 10V)$$

Operating Range

The operating range for the IC200ALG261 module is shown in the following graph.

