



NEMA 4X



ABS Plastic

Overview:

The **CANLC01** is a load cell digitizer available for DeviceNet or CANopen. The module has two separate ports, each port has its own A/D converter with a primary and secondary load cell channel. Both ports can be read from the network simultaneously, the channel that the port is using must either be selected by the network or can be multiplexed. If the channel is selected by the the network, it provides a great implementation for counting scale applications or for applications where simultaneous readings are not required. In applications where up to four load cells need to be constantly read, the channels can be multiplexed to provide a pseudo-simultaneous reading at a lower update rate. This can be used to eliminate a summing card in scales with up to 4 load cells.

The module provides the necessary excitation voltage for the load cells from the Network power or from the auxiliary connector in isolated applications. The user can select AC or DC excitation voltage. The module is available in three different enclosures, economical black ABS plastic, Nema 4 aluminum alloy, or Nema 4X polycarbonate. All versions (except with internal connections) are potted to help protect against vibration, shock, and foreign matter. The Network connector is available in a standard 5 pin sealed micro connector or a low cost 5 pin Combicon connector with screw flanges. The Combicon connector allows the use of lower cost cabling, and also allows the use of a dual row Combicon plug to facilitate the daisy chaining of modules in the network.

Network Operation:

The DeviceNet version supports UCMM Explicit, Poll, Peer-to-Peer, COS, and Strobe connections. The CANopen version supports communication through SDOs and PDOs. Please see the CANLC01 CANopen and CANLC01 DeviceNet Network Specifications for more details.

Applications:

Weigh scales, counting scales, conveyor automation.

Ordering Information:

Order #: CANLC01-NT-NC-NI-C1-C2-EN-T

| Abbreviation | Meaning | Option | |
|--|------------------------------|--|--|
| NT | Network Type | CO = CANopen | |
| | | DN = DeviceNet tm | |
| NC | Network Connector | or $MC = 5$ pin micro | |
| | | CB = 5 pin Combicon with screw flanges (available only in econo enclosure) | |
| NI Network Isolation NI = Non-Isolated | | NI = Non-Isolated | |
| | | IS = Isolated (Isolation is required for DeviceNet tm compliance if the unit is | |
| | | connected to a device powered by a source other than DeviceNet tm) | |
| C1 | Port 1 Connector | DB = DB-9 | |
| | | PT = Pigtail w/strain relief (please specify cable type and length when ordering) | |
| C2 | Port 2 Connector $DB = DB-9$ | | |
| | | PT = Pigtail w/strain relief (please specify cable type and length when ordering) | |
| | | NO = None (only one A/D port) | |
| EN | Enclosure Type | AB = ABS | |
| | | AL = Nema 4 Aluminum | |
| | | PC = Nema 4X Polycarbonate | |
| | | NO = None (Board Only) | |
| Т | Temperature Range | I = Industrial (-40 + 85C) | |

Load Cell Connector Pinout DB-9

| Pin Number | Description |
|------------|-------------|
| 1 | Excitation+ |
| 2 | Sense+ |
| 3 | Signal A+ |
| 4 | Signal B+ |
| 5 | AGND |
| 6 | Excitation- |
| 7 | Sense- |
| 8 | Signal A- |
| 9 | Signal B- |