



## **USB Communications Adapter for DC Series Controller/Drivers**



**Specifications** 

• Electrical Signalling Standard – TIA-485

• Drive voltage: ±5V

 Maximum serial data rate: 1Mbaud (with DC-series controllers it operates at 115,200 baud)

- Dimensions: 53 x 16 x 13 mm (2.1 x 0.64 x 0.50 inches)
- Ambient temperature range: 0°C to +85°C
- Supports Multi-drop Bus Topology
  - Termination on data lines: 120 ohms x 2 locations

## **Recommended Wiring Configuration**

- A and B coupled in twisted-pair, with outer shielding
  - Shield grounded to only one end of each wire segment
- Cable must carry a ground conductor between all devices
- "Far-end" terminator should be added between A and B data signals, at the controller unit most remote from the CI-200

The **CI-201** provides a communications interface between any set of AccelMotion DC-Series Controller/Driver Modules and a standard PC with USB 2.0 compatibility.

It utilizes a simple Serial Port model and Virtual Port Driver to allow easy serial host access to DC-Series module CLI (Command Line Interface) via USB, at 115kbaud. It utilizes the data connection of any USB-type-A socket on any PC, using USB 2.0 compatibility (including USB3.0).

The CI-201 can be easily utilized by Windows and Linux scripting programs (such as LabView, Python, etc.) and by terminal programs (such as Console, TeraTerm, HyperTerminal, etc.). AccelMotion recommends the use of its **AccelCom** terminal, which automatically supports the CI-201 via virtual COM port and also provides helpful programming and parameter-setting features at no cost.

The AccelMotion (AM) Communications Bus is based heavily on TIA-485 (RS-485) electrical standards, carrying serial data at 115,200 baud, and specified as a sheilded differential twisted-pair connection, terminated at each end.

The CI-201 includes a grounding terminal in addition to the A (D+) and B (D-) connections, allowing common grounding (which limits DC offsets between units), and includes a built-in 'near-end' terminating resistor.

More wiring information is in the CI-201User Guide.

**CI-201 contents:** USB communications adapter unit, and resistor for far-end termination

## CI-201 Connector End-View (+Q) **W**(-Q) **B**