

PRESS RELEASE

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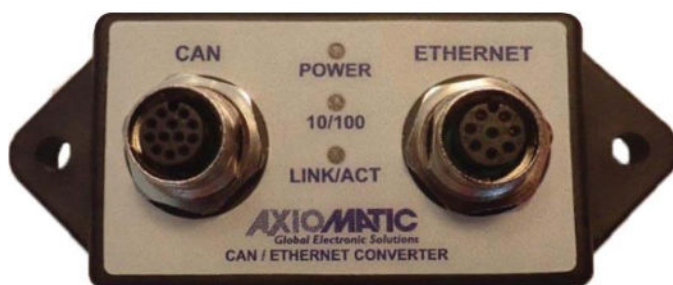
Axiomatic releases a compact Protocol Converter for CAN (SAE J1939), Ethernet, RS-422/ RS-485, and two RS-232, suited for harsh environments.

The AX142100A Protocol Converter enables bidirectional data exchange between the three serial ports (one RS-422/ RS-485 and two RS-232), CAN (SAE J1939), and Ethernet (proprietary TCP communications) based on custom routing configuration. Data is forwarded “as-is” between the different serial ports. CAN/ Ethernet data is forwarded directly to serial interfaces with the configuration allowing the user to specify the CAN message ID (or TCP port) to listen for data to be forwarded.

The device has two connectors; one for CAN/ RS-422/ RS-485/ RS-232, and the other for Ethernet/ Power. The CAN port is isolated, and its default baud rate is 250 kbit/s. The RS-422 can support baud rates up to 105 Mbit/s. RS-422 connections can also be used as RS-485 with some changes in the wiring. The two RS-232 ports can operate at baud rates up to 400 kbit/s and accept three-wired connections. The Ethernet port features Auto-MDIX and can work up to 100 Mbit/s.

All parameters can be configured through a web browser using the built-in web server running on the device. The functionality of the web interface includes but is not limited to the following.

- Specify CAN message filters and CAN message IDs to be received
- Link RS-232 or RS-422 to CAN bus and Ethernet
- Define CAN node ID and baud rate
- Define Ethernet parameters (IP address, netmask)
- Configure message queues



The Converter has one tri-color LED for Power and 2 green LEDs for Ethernet. It can operate with DC power between 9 to 36 V. Surge, reverse polarity, overvoltage, and undervoltage protection is provided.

The unit is IP67 rated with one 12-pin and one 8-pin M12 Phoenix Contact connector. It is designed for harsh environments having power transients, humidity, vibration, and shock. It operates from -40 to 70°C (-40 to 155°F).



The AX142100A can be purchased as a kit with P/N: AX142100AK. The kit, in addition to the device, includes two mating cables AX070531 (1.7 m (5.5 ft.), 8-pin M12 A-coded, Unterminated Leads, Ethernet Jack, Ethernet and Power Cable) and AX070533 (RS-232, RS-232, RS-422 (RS-485) Cable 1.5 m (5 ft.), 12-pin M12, Unterminated Leads, CAN Cable).

Visit <https://products.axiomatic.com/item/connectivity/protocol-converters-ethernet-rs-422-rs-485/ax142100a> to see detailed specifications.

Protocol Converters receive information in one communication protocol and transmit it over another protocol for device interoperability within a larger system. The AX142100A comes from Axiomatic's extensive line-up of Protocol Converters which, among others, includes:

- AX140900, CAN/Ethernet Converter
- AX140900RST, Ethernet/CAN Converter, RESTful
- AX140970, Dual CAN FD to Ethernet Converter
- AX141530, Automotive Ethernet to CAN Protocol Converter
- AX141550, Gigabit Automotive Ethernet / Gigabit Ethernet Converter

Axiomatic designs and develops communication protocol converters, routers, and gateways tailored for automotive, hybrid, electric, and off-highway vehicles, as well as trucks. Our connectivity solutions are used in industrial applications, lift systems, construction and mining equipment, and mine control operations.

Our connectivity solutions are compatible with a diverse range of protocols, such as CAN (CAN 2.0A, 2.0B, SAE J1939, and CANopen®), Ethernet, Gigabit Ethernet, Automotive Ethernet, Gigabit Automotive Ethernet, Modbus TCP/IP, RS-232, RS-485, RS-422, Power Line Communications (PLC), and LIN. We also offer interface products that facilitate wireless communication via WiFi and Bluetooth®.

You may browse through the complete catalog of our Connectivity products at: <https://products.axiomatic.com/category/connectivity>

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