



## IQA-485 RS-485 to RS-232C Converter



### Plug-n-Play Intelligent RS-485 to RS-232C Converter

The IQA-485 is a professional grade RS-485 to RS-232C converter that is designed to offer the highest degree of circuit protection and isolation for interconnected equipment. Typical RS-485 to RS-232C converters offer little or no surge, voltage or current protection for interconnected equipment. As automation systems become more prevalent and interconnect wires are becoming more ubiquitous, the chance for shorts, surges and malfunction dramatically increases. Incidental damage to a single interconnect wire can often cause hundreds if not thousands of dollars of damage to one or more interconnected component, not to mention the cost of troubleshooting necessary to pinpoint the source of such problems. In addition, there is becoming a greater need everyday to interconnect new control and automation system offerings which provide RS-485 communication with existing equipment that only offers RS-232C standards. Also, RS-485 is becoming the norm where long wiring runs are required (greater than 50 feet) which is often beyond the accepted standard for RS-232C. The IQA-485 is the simple answer to these issues!

### Opto-Isolation

Potentially damaging current and voltage spikes can be present in virtually all communication gear. Inadvertent wiring errors or shorts also cannot hurt equipment connected to unprotected communication lines. In addition, ground loops and other electrically-induced noise can enter interconnect wiring. The IQA-485 optically isolates these dangerous electrical elements and eliminates/blocks any hum noise that may be injected into communication lines connected to the IQA-485.

### Static Protection

Static surges are also quite dangerous to computer/control equipment. The IQA-485 offers built-in static and surge protection to 16000 volts, significantly above that offered by competing products.

## FEATURES

- ❑ **Easy Installation**—Small in-line module connects directly to RS-232C equipment. No need for external power supplies.
- ❑ **Bi-directional Communication**—Allows connected equipment to both receive (Rx) and transmit (Tx) data to and from interconnected equipment.
- ❑ **RS-485 Driver Static Protection**—Internal protection circuitry provides up to 16,000 volts of static protection to help protect connected equipment from accidental short circuit or other voltage or current spikes.
- ❑ **Galvanic Opto-Isolation**—Unique design isolates any connected equipment from potentially damaging voltage or current spikes that could destroy equipment connected anywhere on the communication network. Projection screen and drapery control motors can generate very large voltage or current spikes that can damage expensive home automation equipment connected anywhere on the system.
- ❑ **Self Powered**—No external power supply required. RS-232C side powered from connected computer port. RS-485 side powered by interconnected Converging Systems IQA equipment.
- ❑ **Configurable RJ11 Connection to RS-485 bus**—Internal configuration circuit can be customized to interconnect to non-industry standard RS-485 connections.
- ❑ **Plug-n-Play**—No additional software or driver setup required.

## SPECIFICATIONS

RS-232C Source	9-pin DB-9 connector (F). Requires RS232 signal on pin 4 (DTR). Optionally, an isolated power version is available where there is not signal on pin 4
RS-485 Source	4 pin RJ-11 connector, configurable termination (internal)
Communication	Bi-directional. Does not require RTS/CTS handshaking for 485 bus
Opto-Isolation	Galvanic Opto-Isolation circuit
Static Protection	Protection to 16000 volts
Size	2.80"(l) x 1.6"(w) x 1.0"(h)
Weight	2 ounces
Manufacturing	Made in the United States
Compliance	UL certified components

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