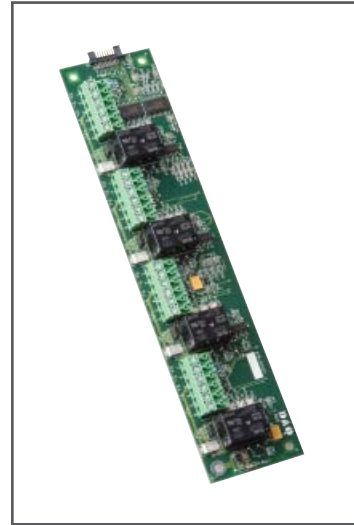# RIOX

INCREASED RADC POINT COUNT

DAQ RIOX (RADC Input/Output Expansion) modules are used to increase the point count of RADC network controllers, enabling the integration of additional exterior StarWatch™ components and sensors. Through direct, on-board connections, up to six RIOX units can be added to a single RADC, with each module providing four additional status inputs and four relay outputs. When added to the eight inputs and eight outputs provided on a host RADC unit, the use of RIOX boards brings the total possible point count associated with one RADC to 32 inputs and 32 outputs.

All inputs are tamper protected and can detect normal, alarm, tamper open, and tamper short conditions on the monitored line. LEDs are utilized to indicate the signal condition and can be used for diagnostic purposes. Software configuration allows for normally open or normally closed contacts to represent the normal condition. Outputs are provided with relays from Form C contacts, with link selection allowing outputs to be configured as normally open or normally closed.

Enhancing ease of maintenance and upgrade, all connections are provided with a plug-in terminal block, eliminating the need to disconnect wiring.

The modular design of the RIOX unit allows system engineers to directly match the input/output point requirements of specific applications without the need to incorporate excessive equipment

KEY FEATURES

- Four tamper-protected inputs

- Four Form C relay outputs, configurable as normally open or normally closed

- Capable of expanding the I/O capacity of RADC network controllers to a maximum of 32 inputs and 32 outputs

- All connections to RADC units via plug-in terminal blocks

- Diagnostic LED indication of all alarm points

STARWATCH™

CONNECTIONS

RADC	• 20 pin PC board connector between RIOX and RADC
I/O	• 24 pin pluggable terminal block for I/O connection, available in screw-in or tool-less IDC

MEASUREMENTS / COMMANDS

Inputs	• 4 on-board tamper protected inputs, monitored for line impedance
	• LED indication of sensor condition
	• Tamper short: resistance < 950Ω
	• Normal: resistance between 950 and 1500Ω
	• Alarm: resistance between 1500 and 2500Ω
	• Tamper open: resistance > 2500Ω
Outputs	• 4 relay outputs
	• Form C contact rated for 5A at 100VDC
	• User selection of normally open or normally closed contact

POWER

Input	• All power supplied by host RADC
	• 12VDC at 150mA
	• 8V at 12mA
	• 5V at 40mA

ENVIRONMENTAL

Operating	• -20 to +70°C
Storage	• -20 to +70°C
Humidity	• 5 to 95% non-condensing

CONTACT

DAQ Electronics, LLC
262B Old New Brunswick Road
Piscataway, NJ 08854 USA

T 732.981.0050 F 732.981.0058
www.daq.net