#### PRODUCT DESCRIPTION

# RADC

## DATA COLLECTION AND PROCESSING

The multi-function RADC (Remote Area Data Collector) acts as a network controller for the StarWatch<sup>™</sup> suite of security products, offering a versatile communications interface for door controllers, alarm panels, and access/ secure keypads.

As an intelligent field device, the unit interfaces with exterior components and intrusion detection sensors over an ArcNET LAN (Local Area Network) and through on-board I/O connections, including eight tamperprotected status inputs and eight relay outputs. Total point count can be expanded to 32 inputs and 32 outputs via seamlessly connected RIOX expansion modules.

# The RADC efficiently collects and processes data received from multiple connected devices and reports relevant information to the system PMC data center. The RADC can be fully integrated with the StarWatch frontend operating system or used as a stand-alone area controller, making intelligent control and monitoring decisions based on the local flow of data and userdefinable configuration settings.



Forming the core of the RADC, the StarGate III module facilitates high-speed data management and sensor integration

### **KEY FEATURES**

- Four RS232 / RS485 communication ports provide interface to intelligent sensors and additional StarWatch units
- Eight on-board inputs and eight outputs, expandable to up to 32 inputs and 32 outputs via RIOX modules
- Incorporates full anti-passback functions
- Monitors power supply, low battery, and cabinet housekeeping points
- LED indications for operational status

A single unit is capable of communicating with up to 32 devices, including other RADC units. An ethernet port and four serial communications ports are provided, each selectable as either RS232 or RS485. Utilizing DAQ's PILOT software tool, the RADC also supports programmable logic, enabling the use of sophisticated, user-defined applications.





PROCESSING	
Processor	• Intel 80386 EX running at 25MHz
Memory	• Flash 512K x 16
	<ul> <li>SRAM 2x512Kx16 battery backed, expandable to 5x512Kx16</li> </ul>

COMMUNICATIONS		
Interface	<ul> <li>On-board ArcNET controller operating at speeds up to 2.5 Mbit per second over isolated RS485 or fiber optic</li> </ul>	
4 Serial Ports	• Port 1: RS232, RS485, Bell 202 modem	
	• Port 2: RS232, isolated RS485	
	• Port 3: RS232, RS485	
	• Port 4: RS232, RS485	
Line Security	• Interface to DES encryption devices	
	<ul> <li>Class B line security with 6 months non-repeating messages</li> </ul>	

ENVIRONMENTAL		
Operating	• -20 to +70°C	
Storage	• -20 to +70°C	
Humidity	• 5 to 95% non-condensing	
Vibration	• Meets UL 1076 jarring tests	
Radiation	• Certified to FCC part 15, class B	
Packaging	<ul> <li>Tamper protected NEMA 1 enclosure for interior applications</li> </ul>	
	<ul> <li>Tamper protected NEMA 4 enclosure for exterior applications</li> </ul>	

©2019 DAQ Electronics, LLC. All rights reserved.

This literature is for guidance only. It does not constitute recommendations, representation, or advice, nor is it part of any contract. Our policy is one of continuous product improvement, and the right is reserved to modify the specifications contained herein without notice. All trademarks and names mentioned in this document are duly acknowledged.

# **TECHNICAL SPECIFICATIONS**

MEASUREMENTS / COMMANDS		
Inputs	<ul> <li>8 on-board tamper protected inputs, expandable to 32 with six 4-point RIOX cards</li> </ul>	
	<ul> <li>Capable of detecting normal, alarm, tamper short, and tamper open conditions</li> </ul>	
Outputs	<ul> <li>8 on-board relay outputs, expandable to 32 with six 4-point RIOX cards</li> </ul>	
	<ul> <li>Each contact is Form C selectable as 1 Form A or 1 Form B, rated for 10A at 125VAC</li> </ul>	
Design	<ul> <li>All inputs and outputs meet requirements of UL 1076 surge protection</li> </ul>	

POWER	
Input	• 120/208/250VAC, 60Hz
	• 220VAC, 50Hz
Output	<ul> <li>3A at 13.8V for charging backup battery</li> </ul>
	<ul> <li>1.1A at 12VDC for powering up to 32 sensors</li> </ul>
	<ul> <li>600mA at 20VDC for powering JSIDS sensors</li> </ul>
Battery	<ul> <li>8 hour battery backup</li> </ul>
	<ul> <li>Charger disconnects for 10.5V low voltage disconnect ±10% and 15.7V high voltage disconnect ±10%</li> </ul>
Consumption	• 18W max with full expansion



