eRADC

ENHANCED COMMUNICATIONS

The multi-function eRADC (ethernet-enabled Remote Area Data Collector) adds 10/100 Mbps wired Ethernet capability to the standard RADC, improving the speed and reliability of communications with StarWatch™ front-end software. Eliminating the need for serial or copper wiring and the traditional Poller Mux layer of equipment, the unit allows users to utilize existing network infrastructure for all communications.

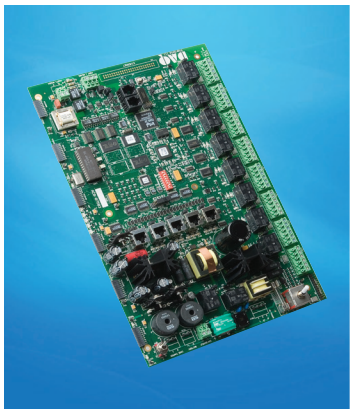
ETHERNET FEATURES

- Supports IEEE 802.3 / 802.3u-100Base-TX / 10Base-T Physical Layer
- 10/100 Mbps, Full / Half duplex auto negotiation
- Supports UDP & TCP/IP

DATA COLLECTION AND PROCESSING

The eRADC acts as a network controller for the StarWatch 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 tamper-protected 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 eRADC efficiently collects and processes data received from multiple connected devices and reports relevant information to the system PMC data center.

The eRADC can be fully integrated with the StarWatch front-end operating system or used as a stand-alone area controller, making intelligent control and monitoring decisions based on the local flow of data and user-definable configuration settings. A single unit is capable of communicating with up to 32 devices, including other eRADC units. An ethernet port is provided along with four serial communications ports, each selectable as either RS232 or RS485. Utilizing DAQ's PILOT software tool, the eRADC also supports programmable logic, enabling the use of sophisticated, user-defined applications.



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

CORE CAPABILITIES

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

TECHNICAL SPECIFICATIONS

PROCESSING

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

COMMUNICATIONS

Interface	• On-board ArcNET controller operating at speeds up to 2.5 Mbit per second over isolated RS485 or fiber optic
Ethernet UDP network interface	
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 • Class B line security with 6 months non-repeating messages

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	• Tamper protected NEMA 1 enclosure for interior applications • Tamper protected NEMA 4 enclosure for exterior applications

MEASUREMENTS / COMMANDS

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

POWER

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

CONTACT

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