real-time data. remote access.

RACO reliability.
wireless rtu

features

1. Totally Wireless RTU
   Easy to install. Goes where landlines can’t, with 98% availability across North America.

2. Reliable, Web-Based Communication
   Triple-redundant, secure website links WRTU with AlarmAgent.com system.

3. Secure, 24/7 Access
   Retrieve equipment and status info anytime, from any web-enabled device or by calling a toll-free number.

4. Robust Monitoring & Control Functionality
   Simple configuration through system templates. Integrates eight digital and two universal inputs, and two relay outputs. Receive status of all channels — including analog — in real-time.

5. Straightforward User Interface
   Immediate status updates for a number of functions: signal strength, transmission, local service registration, armed/disarmed, AC/battery, on/off.

6. Custom User Templates
   Easier configuration remotely or locally. Optimized for water and wastewater pump applications.

7. On-Demand Custom Reporting
   System alarm and status reports, including battery and charging/discharging status. Data exports with customizable ranges.

8. Flexible Alarm Notification & M2M Control
   Instant alarm notification by voice, SMS, pager and email. Ability to control locally connected devices.

9. Over-the-Air Firmware Updates
   Allows users to update their WRTUs remotely — no need for a field visit.

(WRTU shown at actual size)
Dependable, real-time alarm monitoring and detection. Highly customizable notification preferences. Around-the-clock status access from almost anywhere. Simple administration of WRTUs, preferences, users, reporting parameters and more.

AlarmAgent.com’s real-time report-generation capability is optimized for pump applications. Users can spot clogged or malfunctioning pumps in time to prevent a major disaster. And now users can receive RTU health reports, too.

AlarmAgent.com combines the latest in data communications and wireless technology with the reliability and reputation of RACO’s half-century of industry experience.
web-based interface

**monitor** — View real-time system activity on a single, straightforward dashboard.

AlarmAgent.com’s user-friendly, web-based interface puts everything you need right at your fingertips. The easy-to-use control panel now allows you to access real-time driven data, including WRTU status, digital channel open / close, analog measurements, pump status and arm / disarm notifications. You can still monitor alarm activity (across multiple stations) and details of alarm acknowledgment activity on demand.

**report** — Generate comprehensive reports on demand with just the click of a mouse.

AlarmAgent.com gives you immediate access to the custom reporting you need, so creating your reports is simple. We’ve made it easier than ever for you to generate comprehensive reports and pump station analyses. The collected data can be analyzed to optimize system efficiency for your operation. The on-screen interface provides customizable ranges, which allow you to view your data as you specify.

With a few simple clicks, your interface will produce your selected reports on demand, including digital reading, analog reading, pump runtime, pump GPM, pump starts ratio, pump station flow, pump performance, arm / disarm events, WRTU commands, real-time channel status, template reports and RTU health reports.

**configure** — Easily set and administrate the parameters of your system.

AlarmAgent.com provides extreme flexibility for custom configuration. Add stations. Change alarm parameters. Manage users and update their notification preferences. All this functionality and more is possible through clear instructions and drop-down menus that allow you to manage your selections in just seconds.
system options

customizable notification

Today’s technology allows people to be reachable wherever they go. That’s why AlarmAgent.com’s real-time notification features employ all of today’s personal and business communications technology — to help you ensure, and document, that your alarms are received and responded to as quickly as possible.

In an alarm condition, AlarmAgent.com will send notification through cell phone, email, landline, pager or SMS.

Recipients may acknowledge these alarm notifications during voice calls or through email responses. Users can also proactively respond using a toll-free number or the AlarmAgent.com system dashboard.

On screen, administrators can easily add users, customize their methods of contact and determine the proper hierarchy for notification.

flexible service options

AlarmAgent.com provides several advantages over landline-based service, including lower cost, greater reliability, the ability to go where land-based systems can’t and no cellular provider contract.

AlarmAgent.com service agreements are completely customizable. You can opt to receive real-time, periodic or event-driven data. Your RACO representative will help you determine the right notification frequency for your needs — whether it’s daily status reports or up-to-the-second updates. Select your preferred terms of one-year, two-year, three-year or monthly agreements.

A variety of templates make configuration easy. Just choose your application and configure digital input alarms, power failure alarms, analog alarms, reporting details and more.

wide-ranging applications

- Water & Waste
- Electric Utility
- Building Management
- HVAC & Refrigeration
- Equipment Rentals
- Agricultural
- Oil & Gas
- And More

learn more at www.AlarmAgent.com

Visit our website for detailed information such as a full interactive demo, engineering specifications, owner’s manual, service agreements, helpful web links and more.
specifications

MODELS
Real-time AlarmAgent.com Wireless Remote Terminal Units (WRTUs) are offered in four different models:
AA-102DOR AlarmAgent.com WRTU with NEMA 1 enclosure
AA-102DORT AlarmAgent.com WRTU with open chassis
AA-102NEMART AlarmAgent.com WRTU with NEMA 4X enclosure and phantom antenna

ELECTRICAL
Eight Digital Inputs: For connection to dry (unpowered) contacts. Open circuit voltage 5 VDC; closed circuit current 2 mA DC.
Two Universal Signal Inputs: Digital: Open circuit voltage 5 VDC; closed circuit current 2 mA DC.
Analog: 4–20 mA, single ended. Maximum voltage drop 2.5 VDC.
Resolution: 0.1%; absolute accuracy is 0.25%.
Two Relay Outputs: Normally open relays, 0.5-ampere @ 120 VAC
Scheduled Relay Operations: Relays can be configured to automatically open / close for time of day.
Manual Relay Operations: Manually turned off/on via the website.
M2M Control Operations: Wherever there is an unacknowledged alarm, relay will energize.
Battery Backup: 24 hours, 12 V @ 1.2 Amp hr
Power Management: System intelligently manages power during power failure.

Power Requirements:
User supplied. The WRTU operates on 12–24 VDC power input.
With 12 VDC input, current is 1-ampere peak, 200 mA average.
With 24 VDC input, current is 0.5-ampere peak, 100 mA average.

Battery Charging: Precision voltage controlled to maximize battery life and rapidly recharge the battery after power failure.
Power Failure: Automatic alarm for external power failure and low battery detection.
Power Consumption: 2 watts nominal
Solar Power: The WRTU is operable directly from a 13.6 VDC solar power unit. Average current is 175 mA or less.
Surge Protection: Digital inputs are opto-isolated and rated at 5,000 V.
Universal inputs are rated at 600 watts.
Power input is protected to 1,500 watts peak. The fuse is automatically reset.

PHYSICAL
Enclosure:
Open chassis: 9.6'' H × 4.0'' W × 2.44'' D
NEMA 1 enclosure: 9.6'' H × 4.35'' W × 2.75'' D
NEMA 4X enclosure: 11.5'' H × 4.33'' W × 5.5'' D

Mounting Centers:
Open chassis: 3.5'' × 5.9375''
NEMA 1 enclosure: 3.5'' × 6.59375''
NEMA 4X enclosure: 4'' × 8.75''

Weight:
Open chassis: 2.4 lbs. w/ rubber duck antenna
NEMA 1 enclosure: 2.7 lbs. w/ rubber duck antenna
NEMA 4X enclosure: 5.5 lbs. w/ phantom antenna

ENVIRONMENTAL
Temperature Range:
Operating, -30–70° C (-22–158° F)
Storage, -40–85° C (-40–185° F)
Humidity: 0–95% non-condensing

COMMUNICATIONS
Real-time bi-directional WRTU communications are handled by the AlarmAgent.com secure server via the wireless cellular network. AlarmAgent.com features a built-in communication failure alarm and power failure alarm.

SYSTEM CONFIGURATION
The WRTU is configurable by two possible means: via dipswitch, or wirelessly via AlarmAgent.com. By selecting from four templates that are optimized for duplex pump stations with or without totalizer and triplex pump stations with or without totalizer, rapid installation and error-proof startup are virtually guaranteed. Three additional templates are available for more general applications.

ALARM AND SYSTEM MESSAGES
User-defined alarm and system messages are delivered via voice calls, SMS messages, alphanumeric pagers and email to an unlimited number of user-specified destinations. Authorized personnel acknowledge alarms during voice calls via a toll-free number, email or through the AlarmAgent.com website.

OPERATOR INTERFACE
The AlarmAgent.com WRTU includes pushbuttons to turn the unit on or off, to arm or disarm the unit, to cause a special test call to be generated, and a digital input "accept" function to assist in the setup of the WRTU.

LEDs are used extensively throughout to indicate the status of the following subsystems: AC power status, battery status, network service availability, a 10-segment LED bar graph for service signal strength, actively transmitting, test report, customer account status, template setting status, individual input channel state, individual relay output state, and if any channels have exceeded their daily limit of transmissions.

WARRANTY
Three-year parts and labor warranty, FOB factory, Emeryville, Calif.

FIRMWARE UPGRADES
AlarmAgent.com WRTU firmware is over-the-air upgradeable.

GO TO WWW.ALARMAGENT.COM TO ACCESS MORE INFORMATION
• Product Info
• Order Online
• Manual
• Tech Support

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why RACO?
Since 1948, RACO has built a reputation for reliability, innovation and customer service. We look for the latest breakthroughs and insist that they meet our standards before introducing them to our customers.

We are proud to put our name on AlarmAgent.com. It joins our complete range of alarm detection and notification systems that are ideal for a variety of applications. From the latest innovations to the trusted industry standards, RACO has a solution to fit your needs.

SINCE 1948
REMOTE ALARMS AND CONTROLS

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