



GE Interlogix InfoGraphics

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REN, RIM and RRM

ACU remote modules and enclosures

Overview

High-density alarm inputs and relay outputs are available with the Remote Input Modules (RIM) and Remote Relay Modules (RRM). When multiple RIMs and/or RRMs are required, a large Remote Enclosure (REN) is available for mounting the modules in flexible, customer-definable configurations.

RIMs and RRMs are connected through ACU field controllers. These alternative connection methods make it possible to optimize the cost of alarm and remote control installations by utilizing the reader communication paths, but not sacrificing the standard reader capacity.



REN, RIM and RRM

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- Intelligent remote modules provide flexible and cost-effective status monitoring and control capabilities.
- All remote modules communicate with ACUs via RS-485 multidropped communication lines and reports an alarm when communication is lost.
- Use of remote modules on an ACU does not diminish the ACU's standard reader capacity (except for 16 reader ACU's).

Remote Input Module (RIM)

- Provides 16 UL grade AA supervised inputs and three unsupervised inputs.
- Sixteen tri-color LEDs show the state of the supervised input.
 Eight LEDs provide communication feedback and on-line status.
- Two local Form-C relays are provided (SPDT rating: 30 VDC at 2 amps).

Remote Relay Module (RRM)

- · Sixteen LEDs show the state of each relay.
- Six LEDs provide instantaneous polling and communication status feedback.
- Two unsupervised inputs.

Remote Enclosure (REN(

 RIMs and RRMs may be combined into a special enclosure, and customized for most specialized requirements when large numbers of alarm inputs and/or relay outputs are required.

Remote Enclosure Display (REND)

 Same as REN enclosure except the RIM's alarm status LEDs are visible from outside the enclosure. Also provided is an area for inserting a description of each alarm input.

REN, RIM and RRM

Quantity of Remote Modules per ACU (Note 1)

| Sapphire, Sapphire Pro and Diamond II | | |
|---------------------------------------|------------|------------|
| Module | ACU | ACU Elev |
| RIM | 8 (Note 2) | 8 (Note 2) |
| RRM | 8 (Note 2) | 8 (Note 2) |

Note 1 = See ACU and Remote Modules Configuration Guide for further details.

Note 2 = Total of eight in any combination.

Comparative Features of Remote Modules

| Model No. | Enclosure Dimension | Includes | Max. Model Capacity | Sup. Inputs | Outputs | Power Supply |
|-----------|--|----------|---------------------|-------------|---------|--------------|
| RIM-0** | No enclosure - back plate only | 1 RIM-0 | 1 RIM | 16 | 2 | No |
| RIM-1 | 12" x 12" x 4" (30.5 x 30.5 x 10.2 cm) | 1 RIM-0 | 1 RIM | 16 | 2 | No |
| RRM-0** | No enclosure - back plate only | 1 RRM-0 | 1 RRM | 0 | 16 | No |
| RRM-1 | 12" x 12" x 4" (30.5 x 30.5 x 10.2 cm) | 1 RRM-0 | 1 RRM | 0 | 16 | No |
| REN | 20" x 16" x 5" (50.8 x 40.64 x 12.7 cm) | | 2 RIMs, 2 RRMs | 32 | 32 | Optional |
| REND | 20" x 16" x 5" (50.8 x 40.64 x 12.7 cm) | | 2 RIMs, 2 RRMs | 32 | 32 | Optional |

Note: RIMs, RRMs and RENs can be powered from the 24 VDC ACU power supply.

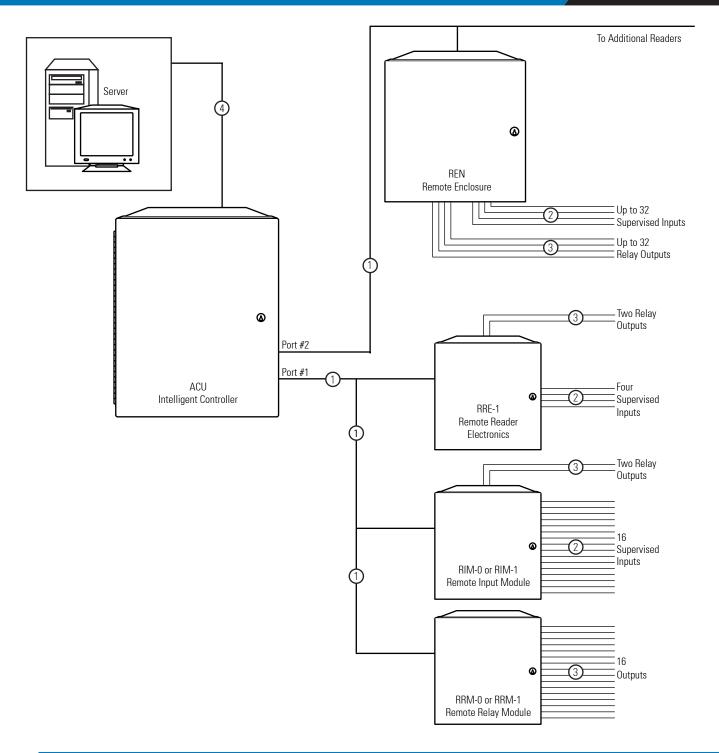
Six State Supervision

All alarm input points of the ACU, RRE and RIM are fully supervised using parallet/series end-of-the-line resistor network. Six-state supervision indicates all wiring conditions.



^{**} Configurations without the enclosure do not comply with UL1076 and UL294 requirements.

ACU remote modules and enclosures



| Cable # | Description | Belden Cable Number (or equal) | Max. Distance |
|---------|------------------------|---|------------------|
| 1 | Communication (RS-485) | #9842 or Alpha #6222C, 24 AWG, 2-pair, individual shields, braid overall shield And | 4,000' (1,220 m) |
| | Power (24 VDC) | #9409 or Alpha #1897C, 18 AWG, 2-conductor/unshielded | 4,000' (1,220 m) |
| 2 | Supervised input | #9407 or Alpha #1172C, 22 AWG, 2-conductor/unshielded | 1,000' (305 m) |
| 3 | Relay output | #9409 or Alpha #1897C, 18 AWG, 2-conductor/unshielded | 1,000' (305 m) |
| 4 | Communication (RS-485) | #9842 or Alpha #6222C, 24 AWG, 2-pair, individual shields, braid overall shield | 4,000' (1,220 m) |

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ACU remote modules and enclosures

Specifications

Standards

All ACUR2 and ACUR4 controllers are designed in accordance with the following standards:

- UL 294
- FIPS 46-1
- UL 1076
- MIL-STD 450B
- CUL
- FCC CLASS A
- DCID 1/21

Dimensions

(RIM, RRM)

Height: 12" (30.5 cm)Width: 12" (30.5 cm)Depth: 4" (10.2 cm)

Dimensions

(REN, REND)

Height: 20.12" (51.1 cm)
Width: 16.5" (41.9 cm)
Depth: 5" (12.7 cm)

Environmental

Maximum: +66 C (+150 F)Minimum: 0 C (+32 F)Humidity: 95%

Power

 24 VDC @ 4 amp output, 120/240 VAC, 50/60 Hz, 1 amp, 120 watt maximum

Options

(see Order Numbering)

Ordering Information

| Product Description | | |
|--|--|--|
| 16 supervised inputs | | |
| No enclosure, includes back plate and printed circuit boards | | |
| Enclosure with door tamper switch | | |
| /I) 16 output relays | | |
| No enclosure, includes back plate and printed circuit boar | | |
| Enclosure with door tamper switch | | |
| d REND) | | |
| Enclosure; Enclosure with visible alarm status LEDs | | |
| | | |

^{*} Only complete unit with enclosure complies with UL1076 and UL294.

Order Numbering

Select one from each column to determine proper model number for ordering. See example below.

| Enclosure | RIMs | Power Supply | RRMs |
|-----------|--|--|---|
| REN | 0 -None 1 -1 RIM, 16 inputs | N -None P -4A, 24 VDC | 0 -None 1 -1 RRM, 16 outputs |
| | 2 -2 RIMs, 32 inputs | , | 2 -2 RRMs, 32 outputs |
| REND | 0 -None | N -None | 0 -None |
| | 1 -1 RIM, 16 inputs | P -4A, 24 VDC | 1 -1 RRM, 16 outputs |
| | 2 -2 RIMs, 32 inputs | | 2 -2 RRMs, 32 outputs |
| REN- | 1 | N | 1 |

Example = REN-1N1

A remote enclosure (no display window) with one RIM (16 inputs, two outputs), no power supply and one RRM (16 outputs). REND: RIM alarm status LEDs visible from front of enclosure.



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