

## Remote Reader Electronics Modules

### RRE, RRE2, RRE2A & RRE4



Utilization of two-stage access control readers with the InfoGraphics' ACU networked intelligent controller is accomplished using the Remote Reader Electronics (RRE) series of remote reader interfaces.

Four basic versions of the RRE are available: the standard RRE single reader controller, the RRE2 and RRE2A two reader controllers, and the RRE4, which provides control for up to four readers.

Each version has the capability to interface to keypads, door contacts, request-to-exit devices and provides 5 and 12-volt outputs to power readers and request-to-exit devices.

### Features

- Intelligent remote modules provide flexible and cost-effective reader and keypad interfacing, status monitoring and control capabilities.
- All RREs communicate with the ACU family of controllers, including the InVision panel, via RS-485 multi-dropped communication lines.
- Use of RREs on an ACU does not diminish the capacity to utilize Remote Input Modules (RIM) and Remote Relay Modules (RRM).  
*See REN, RIM and RRM datasheet for further details.*

### RRE and RRE2

- Interface reader and/or keypad using virtually any type of industry standard reader technology.
- Provides two local Form C relays per reader (SPDT rating 30 VDC at 2 Amps), which can be used for any control action specified by the system, including door strike activation.
- Provides four UL Grade A supervised inputs for each reader, and one unsupervised input for tamper alarm.
- Interfaces one (RRE) or two (RRE2) readers and/or keypads using Wiegand interfaces up to 500 feet from the RREs.

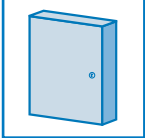
### RRE2A

- Interfaces up to two readers and/or keypads using Wiegand interfaces up to 500 feet from the RRE2A.
- Provides four Form C relay outputs (SPDT rating 30 VDC at 2 Amps).\*
- Provides eight UL grade A supervised inputs and one unsupervised input for tamper alarm.

### RRE4

- Interfaces up to four readers and/or keypads using Wiegand interfaces up to 500 feet from the RRE4.
  - Provides four Form C relay outputs (SPDT rating 30 VDC at 2 Amps).\*
  - Provides eight UL grade A supervised inputs and one unsupervised input for tamper alarm.
- \* *Can be used for any control action specified by the system, including door strike activation.*





## Reader Architecture

The ACU range of field controllers offer the flexibility of RRE installations in several configurations.

A two-stage reader configuration (for some proximity and certain types of Wiegand and smart card readers) can be used with one of four different RRE units separately mounted from the interface to the reader.

- a. A single-reader (RRE) mounted above the door and interfaced to the read head.

- b. A two-reader (RRE2 or RRE2A) or a four-reader (RRE4) mounted at a remote point in the system with the read heads, keypads, alarm points and door strikes connected to it from the door locations.

Each of these configurations also offer the choice of controlling the door lock from a relay at the ACU, or a relay on a RRM. Similarly, alarm inputs from the door may also be configured to an input on the ACU or on a RIM.

## Comparative Features of Remote Modules

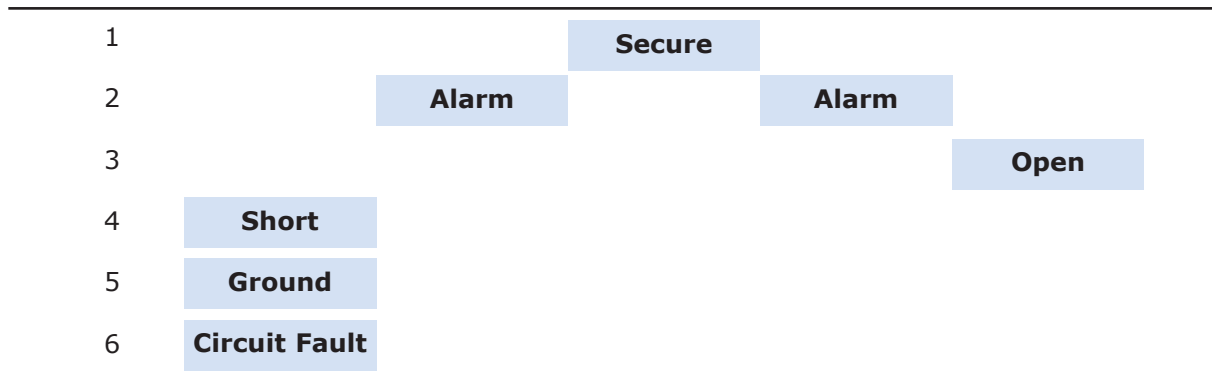
Model No.	Enclosure Dimension (HxWxD)	Includes	Max. Model Capacity	Inputs	Outputs	Power Supply
RRE-0**	No enclosure — back plate only	1 RRE	2 RRE	4	2	No
RRE-1	12" x 12" x 4" (30.5 x 30.5 x 10.2 cm)	1 RRE	2 RRE	4	2	No
RRE2-0**	No enclosure — back plate only	2 RRE	2 RRE	8	4	No
RRE2-1	12" x 12" x 4" (30.5 x 30.5 x 10.2 cm)	2 RRE	2 RRE	8	4	No
RRE2A-0**	No enclosure — back plate only	1 RRE2A	1 RRE2A	8	4	No
RRE2A-1	12" x 12" x 4" (30.5 x 30.5 x 10.2 cm)	1 RRE2A	1 RRE2A	8	4	No
RRE4-0**	No enclosure — back plate only	1 RRE4	1 RRE4	8	4	No
RRE4-1	12" x 12" x 4" (30.5 x 30.5 x 10.2 cm)	1 RRE4	1 RRE4	8	4	No

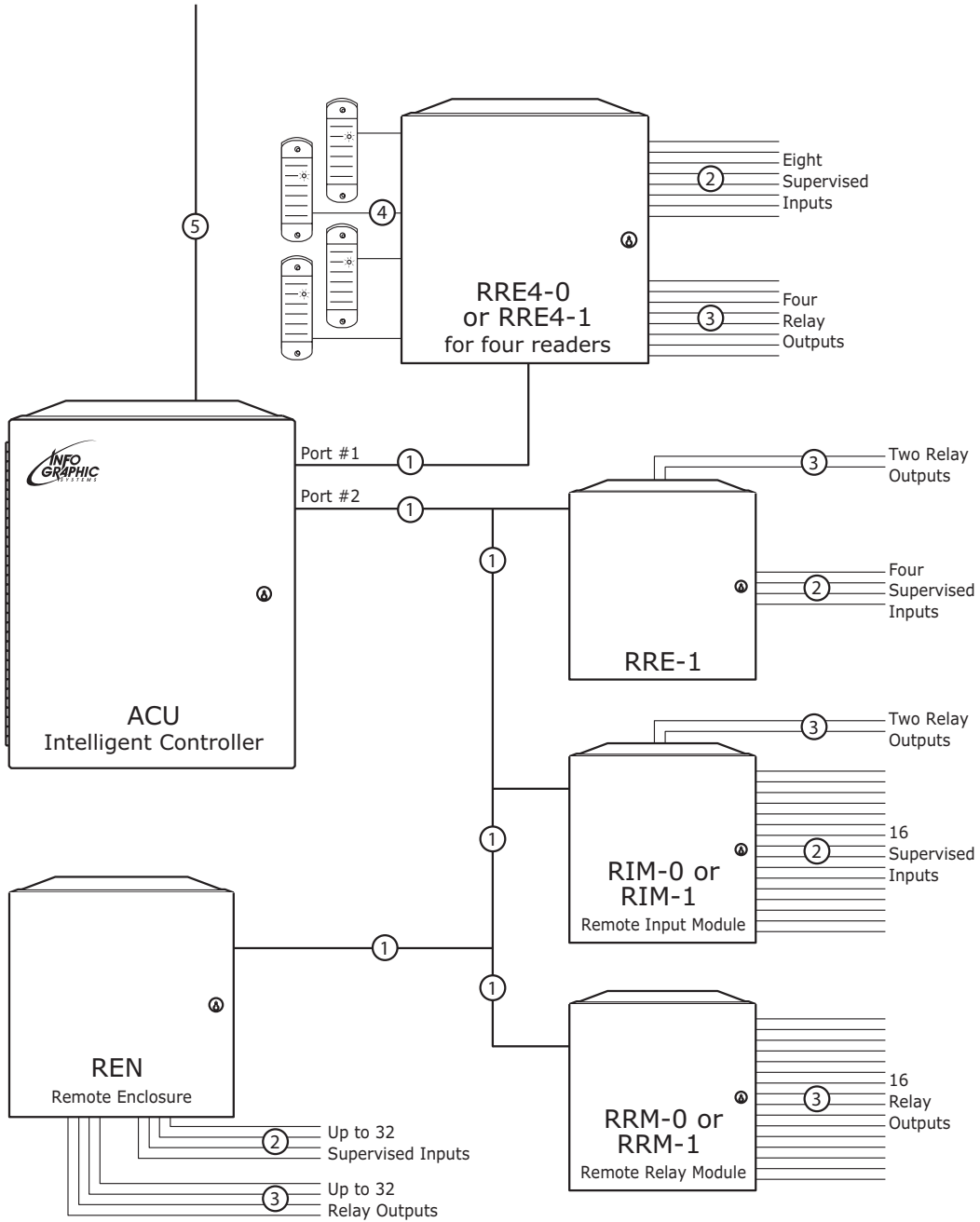
\* RREs can be powered from the 24 VDC ACU power supply.

\*\* Configurations without the enclosure do not comply with UL1076 and UL294 requirements.

## Six-state Supervision

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





Cable Number	Description	Belden Cable Number (or approved equal)	Maximum Distance
①	Reader port communication (RS-485) □ and power (24 VDC)	# 9329-22 AWG, 3-pair/individual shields or □ # 9369-18 AWG, 3-pair/individual shields	1,000" (305 m) 4,000" (1,220 m)
②	Supervised input	# 9407-22 AWG, 3-conductor/unshielded	1,000" (305 m)
③	Relay output	# 9409-18 AWG, 2-conductor/unshielded	1,000" (305 m)
④	Standard reader communication	# 9514-22 AWG, 8-conductor/shielded (typical)	500" (152 m)
⑤	Host communication	# 9842-24 AWG, 2-pair/shielded	4,000" (1,220 m)

## Specifications

### Standards

All RRE modules are designed in accordance with the following standards:

- UL 294
- UL 1076
- FCC CLASS A
- CE
- FIPS46-1
- MIL-STD 450B
- DCID 1/21

### Dimensions

- Height: 12" (30.48 cm)
- Width: 12" (30.48 cm)
- Depth: 4" (10.16 cm)

### Environmental

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

## Ordering Information

Part Number	Description
<b>RRE Remote Reader Interface</b>	
RRE-0	No enclosure, includes back plate and printed circuit board.
RRE-1*	Includes back plate, printed circuit board and enclosure with door tamper switch. 12" H x 12" W x 4" D 30.5 cm x 30.5 cm x 10.2 cm.
<b>RRE2 Remote Reader Interface (2 readers)</b>	
RRE2-0	No enclosure, includes back plate and printed circuit board.
RRE2-1*	Includes back plate, printed circuit board and enclosure with door tamper switch. 12" H x 12" W x 4" D 30.5 cm x 30.5 cm x 10.2 cm.
<b>RRE2A Remote Reader Interface (2 readers)</b>	
RRE2A-0	No enclosure, includes back plate and printed circuit board.
RRE2A-1*	Includes back plate, printed circuit board and enclosure with door tamper switch. 12" H x 12" W x 4" D 30.5 cm x 30.5 cm x 10.2 cm.
<b>RRE4 Remote Reader Interface (4 readers)</b>	
RRE4-0	No enclosure, includes back plate and printed circuit board.
RRE4-1*	Includes back plate, printed circuit board and enclosure with door tamper switch. 12" H x 12" W x 4" D 30.5 cm x 30.5 cm x 10.2 cm.

\* Only complete unit with enclosure complies with UL1076 and UL294.

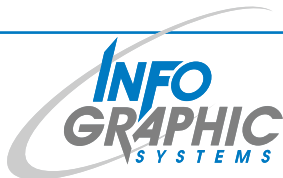
## Optional

RRL Enclosure lock, keyed same as ACU.

AV136441 rev 100501

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