



The RM Series Card Readers are designed and constructed to provide a wide variety of configuration options.

Choose from 3 different RM Series Card Reader technologies: proximity, Wiegand, and magnetic stripe. The attractive polycarbonate, all-weather housing can accommodate any of the three technologies. The universal design lets you mix and match different technologies on the same system, while simultaneously maintaining a consistent appearance.

The three LED colors, red, amber, and green, indicate a range of conditions: valid or invalid card reads, door forced or held open, and system or configuration errors. An audible alert can also be set through the system host to signal these conditions. Regardless of the technologies used, a keypad for entering Personal Identification Numbers (PINs) can be added to any RM Series Card Reader.

An optional backlit LCD display is also available for any RM Series Card Reader that has a keypad. The display shows the date, time, system conditions and user prompts.

All RM Series Card Readers use the same cable and connectors simplifying installation and service. The RM Series Card Readers provide two supervised inputs for door monitoring. The RM Series Card Readers also support two ARM-1 modules for local door lock control.

FEATURES & BENEFITS

- Universal packaging accommodates magnetic stripe, Wiegand, or proximity technologies
- Keypad and backlit LCD display can be combined with all reader technologies
- Magstripe and Wiegand non-keypad readers support reader duress capabilities
- Each RM Series reader provides 2 supervised inputs and 2 control point outputs
- Three high-intensity LEDs, (red, amber and green) indicate system conditions
- Operates in Star or Multidrop configuration
- Retrofits with existing apC panels and iSTAR controllers
- Keypad features audio feedback
- Reads all three ISO standard tracks 75/210/75 bpi
- Built-in tamper switch and security screws protect reader electronics
- Rugged design suitable for interior or exterior environment
- Readers electronics are coated against dust and moisture
- UL 294/1076, FCC, CE, C-Tick compliant

CONFIGURATIONS

The Charts below list the RM Series Card Reader configurations by model numbers. A diamond (u) in a square indicates the presence of a feature.

Magnetic Stripe

	Standard	Keypad	LCD	Conformal Coating	Mullion
RM1-MP*	◆			◆	
RM2-MP*	◆	◆		◆	
RM2L-MP*	◆	◆	◆	◆	
RM3-MP*	◆			◆	◆

* Maximum Card thickness is .033 inches.

Proximity

	Motorola Indala	HID	Keypad	LCD	Conformal Coating	Mullion
RM1-PI	◆				◆	
RM2-PI	◆		◆		◆	
RM2L-PI	◆		◆	◆	◆	
RM1-PH		◆			◆	
RM2-PH		◆	◆		◆	
RM2L-PH		◆	◆	◆	◆	
RM3-PH		◆			◆	◆

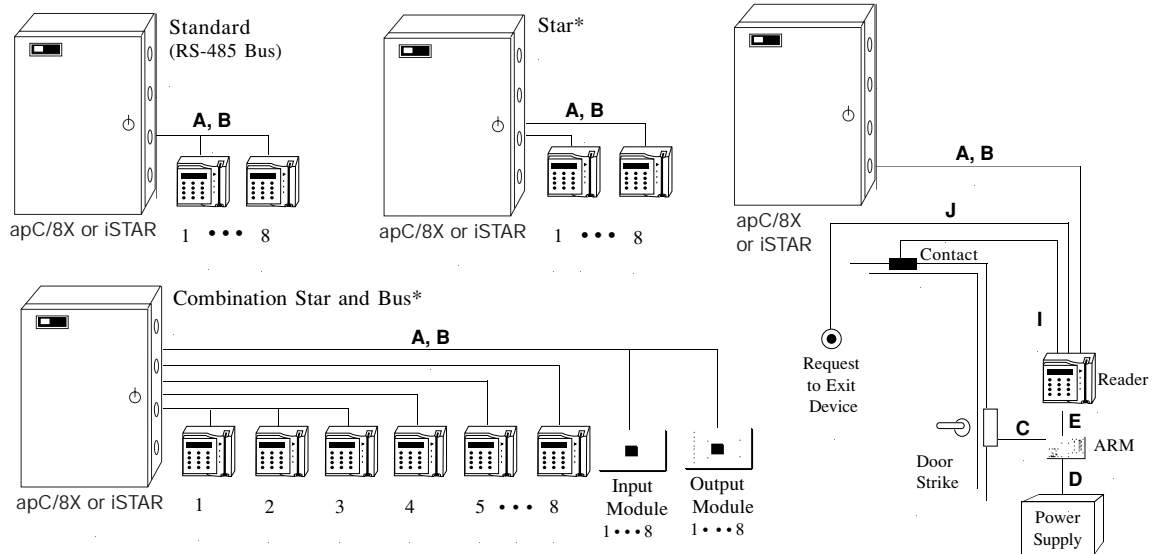
Wiegand

	Keypad	LCD	Conformal Coating	Mullion
RM1-W			◆	

ENVIRONMENTAL SPECIFICATIONS

	Operating Temperature (Environment)	Operating Temperature with Heater Kit	Power Requirements	Dimensions (H x W x D) Weight
Magnetic Stripe: RM1-MP, RM2-MP	32°F to 140°F (0°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	+12VDC 80 mA	5.10 x 5.60 x 1.95 in. (12.95 x 14.22 x 4.95cm) 21 oz. (588 g)
Magnetic Stripe with LCD Display: RM2L-MP	32°F to 122°F (0°C to 50°C) 95% Humidity Non-condensing	NA	+12VDC 180 mA	5.10 x 5.60 x 1.95 in. (12.95 x 14.22 x 4.95cm) 23 oz. (644 g)
Magnetic Stripe Mullion: RM3-MP	32°F to 140°F (0°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	+12VDC 80 mA	5.10 x 1.91 x 1.81 in. (12.95 x 4.85 x 4.60cm) 10 oz. (280 g)
Indala Proximity: RM1-PI, RM1-PI/C, RM2-P1, RM2-PI/C	32°F to 140°F (0°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	+12VDC 80 mA	5.10 x 5.60 x 1.95 in. (12.95 x 14.22 x 4.95cm) 25 oz. (700 g)
Indala Proximity with LCD Display: RM2L-PI	32°F to 122°F (0°C to 50°C) 95% Humidity Non-condensing	NA	+12VDC 180 mA	5.10 x 5.60 x 1.95 in. (12.95 x 14.22 x 4.95cm) 27 oz. (756 g)
HID Proximity: RM1-PH, RM2-PH	32°F to 140°F (0°C to 60°C)	-22°F to 140°F (-30°C to 65°C)	+12VDC 135 mA ave. 250 mA peak	5.10 x 5.60 x 1.95 in. (12.95 x 14.22 x 4.95cm) 21 oz. (588 g)
HID Proximity with LCD Display: RM2L-PH	32°F to 122°F (0°C to 50°C) 95% Humidity Non-condensing	NA	+12VDC 235 mA ave. 350 mA peak	5.10 x 5.60 x 1.95 in. (12.95 x 14.22 x 4.95cm) 23 oz. (644 g)
HID Proximity Mullion: RM3-PH	-22°F to 149°F (-30°C to 65°C)	NA	+12VDC 135 mA ave. 250 mA peak	5.10 x 1.91 x 1.81 in. (12.95 x 4.85 x 4.60cm) 10 oz. (280 g)
Wiegand: RM1-W	32°F to 140°F (0°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	+12VDC 80 mA	5.10 x 5.60 x 1.95 in. (12.95 x 14.22 x 4.95cm) 23 oz. (644 g)
Reader Module: RM-4	32°F to 140°F (0°C to 60°C)	-22°F to 140°F (-30°C to 60°C)	+12VDC 75 mA	4.65 x 3.55 x .60 in. (11.81 x 9.02 x 1.52 cm) 9 oz. (252 g)

WIRING CONFIGURATIONS

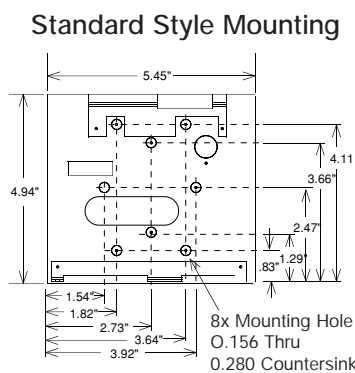
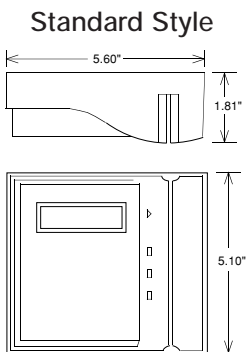


WIRING CONFIGURATIONS

Wire Label	From	To	Function	Belden Part No. ¹	Gauge (AWG)	No. of Pairs	Shielded	Max. Length (ft.)
A	apC/8X	RM, RM4, I/O Modules	Communication	9841	24	1	Yes	4000
B	apC/8X	RM, RM4, I/O Modules	Power ²	8442/8461	22/18 ³	1	No	varies ⁴
C	ARM	Locking Device	Control	8442/8461	22/18 ³	1	No	25
D	ARM	Power Supply	Power	8442/8461	22/18 ³	1	No	25
E	RM, RM4	ARM	Relay Switching	9462	22	1	Yes	25
F	RM, RM4	Proximity/Wiegand	Reader Comm.	9536	24	3	Yes	500
G	Terminal	Modem	(RS-232) Comm.	9855	22	2	Yes	50
H	Terminal	apC	(RS-232) Comm.	9855	22	2	Yes	50
I	RM, RM4	Door Contract	Door Position	8442/8461	22/18	1	No	25
J	RM, RM4	Request to Exit Device	Egress Control	8442/8461	22/18	1	No	25

¹Use Belden Part Number specified or equivalent product. ²Not required if powered locally. ³Gauge varies according to length of wire. Consult apC manual for details. ⁴Length varies according to application.

RM Series Mounting Specifications



For Product Information
Software House
 1-800-550-6660
 www.swhouse.com

1-800-862-7515
 www.swhouse.com

Product specifications and availability subject to change without notice. Certain product names mentioned herein may be trade names and/or registered trademarks of other companies.

