

MD-W11

Wireless Access Control Door Interface

The MD-W11 is a quick and inexpensive solution to connect remote door devices, such as readers, locks and REX Buttons to an access control unit. The units utilizes bi-directional RF data communication to relay Wiegand card and PIN code data, lock and door relay commands, as well as tamper, door monitor and REX messages between the controller and the interface unit. The interface is based on two units per door, one located near the controller and the other near the door.

General Description

The MD-W11 Wireless Access Control Door interface consists of two units per door, one located near the controller (the Near unit) and the other near the door (the Far unit). The Near unit is connected to a Rosslare door controller, such as the AC-215, AC-225, or AC-525. The Far unit is connected to proximity card readers or keypads, such as the AY-K12 and AY-Q64B.

Local charger and backup battery option for the remote unit keeps the door and reader functioning even during power loss.

Full supervision of the remote unit and event signals including Supervision failure, Tamper, Low Battery and power loss of the Far unit are reported to the Near unit and to the controller.

Bi-directional RF communication with data protection using fast proprietary, anti-collision and rolling code protocol; narrow band RF provides high reliability of the wireless link on regular ISM bands.



Main Features

- Maximum range of 70 meters (230 ft) indoors, up to 300 meters (985 ft) outdoors with external fixed antenna. Depending on RF related environmental conditions
- Overall response time of 500 ms when used with Rosslare's AC-225 controller and readers.
 Response time depends on RF link quality, the number of doors used and the controller and reader's response time
- Built-in charger for up to 7Ah backup battery on the Remote unit
- Compatible with all of Rosslare's readers and with many third party standard Wiegand readers
- Separate sets of terminals for door and controller connections
- Case and wall tamper protection. Tamper events from either Near or Remote sides are reported using a Tamper output on the Near unit

PROFESSIONAL GRADE FEATURES

- Transfers proximity card information as well as LED control, Reader tamper, lock relay commands, and REX & Door Monitor events between the coupled units
- The Near unit is powered using the controller's power supply. The Far unit is powered by a local wall transformer. A built-in charger provides a power backup option
- Protected housing with space for Rosslare's BT-04, 12 VDC 800 mAh, Sealed Lead-Acid battery. Suitable for Indoor use
- Available in HR-869MHz and GR-433MHz bands

MD-W11 Wireless Access Control Door Interface



Product Specifications		
EL	ECTRICAL CHARACTERISTICS	
•	Input Voltage:	Far unit: 12-24VAC/VDC Near unit: 12VDC from the controller's power supply or wall adapter
•	Battery Charger:	12V Sealed Lead Acid, up to 7Ah (Far unit only)
•	Input Current:	Standby: 70mA Max: 160mA
OF	PERATIONAL CHARACTERISTICS	
•	Maximum Range:	Indoors: 70 meters (230 ft) Outdoors: 300 meters (985 ft) Range depends on RF related environmental conditions
•	Response time:	Up to 500 ms with Rosslare's AC-215 controller and readers Response time depends on RF link quality, number of doors used as well as controller and reader response time
•	Output Relays:	Far unit: One 5A Form-C relay Near unit: Two 1A Form-C relays
•	Output Types:	Dry contact and open collector
•	Communications:	Bi-directional RF, narrow band. Fast Anti-collision rolling code protocol with data protection. Available in HR-869MHz and GR-433MHz bands, with four selectable channels
•	Data Transfer:	Card and PIN, Lock commands, REX, Door Monitor, LED Control and Reader Tamper
•	Supervisory & Alerts:	Full supervision over the remote unit Alert outputs at the Near unit for Supervision Failure, System Tamper, Reader Tamper, Low Battery, and Power Failure
•	Supported Card transmission formats:	Wiegand 26-bit, 26-bit w/ facility code, 32-bit, 32-bit reverse, 34-bit, 40-bit
•	Supported PIN code formats:	Single key 6-bit Wiegand (Rosslare format), Single key 6-bit Wiegand with Parity, Single key 8-bit Wiegand, 4 keys binary 26 bit Wiegand, 1 to 5 keys, 26 bit Wiegand, 6 keys BCD and parity bits, 26 bit Wiegand
ΕN	IVIRONMENTAL CHARACTERISTICS	
•	Operating Environment:	Indoor Use
•	Operating Temperature:	-10°C to 50°C (14°F to 122°F)
•	Operating Humidity:	0 to 95% (Non-condensing)
SI	ZE AND WEIGHT CHARACTERISTICS	
•	Dimensions:	13 x 8.7 x 3.2 cm (5.1 x 3.42 x 1.26 inch)
•	Weight:	155 g (5.46 oz.)

Components and Options

The MD-W11 is compatible with Rosslare's AC-115, AC-215, AC-225 controllers and others, as well as with the complete range of Wiegand 26-bit PIN/Proximity readers.

The product is compatible with other manufacturers' standard controllers and readers.











AC-225

AC-525

MD-W11BP AY-E20

E20 A

AYC-Q64B

Supported Models

The following models are available:

- **MD-W11FHR** (869MHz)
- **MD-W11NHR** (869MHz)
- MD-W11BP compatible with MD-W11F
- **MD-W11FGR** (433MHz)
- MD-W11NGR (433MHz)

Additional Information

The MD-W11 is covered by Rosslare's 2-Year Limited Product Warranty. For sales information or product documentation, please visit our website: www.rosslaresecurity.com





