



Maximum RFID



MM-6800™ Sentinel-Prox™ Proximity Reader

AWID's MM-6800 Proximity Card Reader provides exceptional reading distance in a slim, compact enclosure for Access Control applications. With a read range up to 8 inches, the MM-6800 reader delivers excellent performance without compromising quality, durability, attractive appearance, and ease of installation.



Installation The MM-6800 reader is designed to fit perfectly on the 1-3/4 inch standard metal door frame or window mullion. The metal-compensation that is built into every MM-6800 reader assures minimum loss of read range when the reader is mounted on a metal surface. The MM-6800 reader also can be fastened by 2 screws on any wall or other surface. Installation may be indoors or outdoors, exposed to weather.

Features The MM-6800 reader contains (a) a 3-color LED, (b) a 4 kilohertz beeper, and (c) a "hold" circuit. Both LED and beeper are

controlled by the reader itself. All three functions can be controlled externally by the host system. The LED can indicate access-granted by the host. The beeper can be used as an alarm that prevents further card reads until the alarm condition is cleared. The "hold" circuit delays code transmission from the reader until the host requests it.

Testing The reader is *self-testing* – using its own LED and beeper, it needs no interface to a controller to assure the installer and cardholder of correct performance. The reader is also *self-diagnostic* – if DC power is unstable, or if electrical noise is induced in the cable, the reader resets and its LED changes to amber.

Operation AWID's proximity readers use a re-present mode that requires that the user remove the card from the reader's field before the card can be read again. This feature eliminates multiple reads from a single presentation of the card. The MM-6800 has both Wiegand data interface for basic 4-wire connection (7 wires when all features are controlled), and also RS-232 serial interface. Code transmission from both interfaces is simultaneous.

Environment The MM-6800 reader is ready for challenging applications. The ABS plastic one-part enclosure, fully potted at the back surface with epoxy resin, stands up to physical abuse and adverse environment.

Credentials All of AWID's 125 kilohertz proximity credentials may be used with the MM-6800 reader. This includes clamshell and graphics-quality cards, keytags, hangtags, and adhesive wafers. Read range varies with the credential type.

FEATURES

Compact size...

Fits on a mullion or door frame

Clean, slim design...

Matches good architecture at site

Ready for rough usage...

Rugged, strong construction

Ready for adverse weather...

One-part enclosure with potting

Easy mounting...

2 screws (supplied) for fastening

Special read range in a small unit...

Up to 8 inches with cards

Visual and audible indicators...

3-color LED and beeper inside reader

Controllable functions in reader...

LED, beeper, hold can be wired to panel

Easy power...

Connects to panel's DC terminals

Quick wiring to host panel...

Basic 4-wire hook-up; 7 wires maximum

Standard Wiegand data output...

Data-0 & Data-1 panel connection

Alternative RS-232 data output...

Interface to PC or special controller

Compatible with other readers...

Wiegand interface used in other readers

Uniform code format...

Standard 26-bit plus special codes

No programming in reader...

MM-6800 is ready to read all AWID codes

Self-testing for good operation...

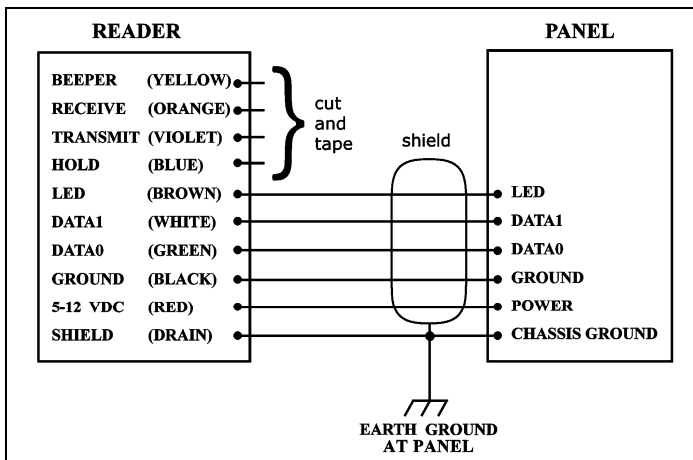
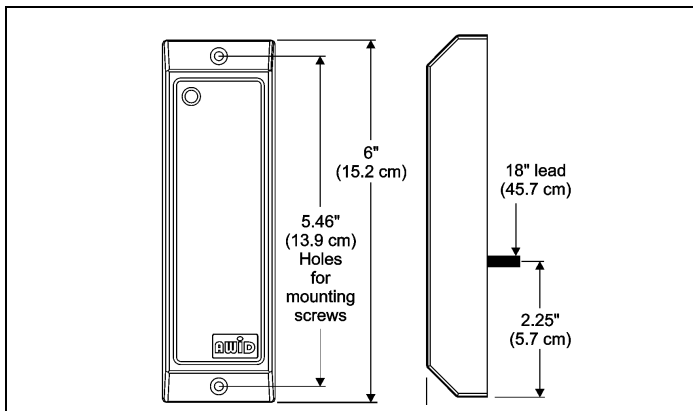
LED & beeper indicate performance

High value ratio...

Excellent performance; modest cost

MM-6800™

Sentinel-Prox™ Proximity Reader



ACCESSORIES AND SUPPLIES

Mounting hardware – 2 #6-32 x 1" thread-cutting screws (supplied). Use other fasteners as needed for mounting.

Power supply – Reader operates with voltage between +5 volts and +12 volts DC. Most controller panels provide suitable voltage on power and ground terminals. External linear, regulated DC power supply may be used (200 mA or more current rating).

Cable for power and data – 22 gauge, stranded, color-coded, overall shielded, not twisted pair. 4 to 7 conductors depending on connection of reader's controllable functions (LED, beeper and "hold"). For Wiegand, up to 500 feet long.

Protective housing – MM-6800 reader is suitable for exposure to rain, snow, and bright sunshine. Mount reader inside a Lexan housing to remove reader from view and abuse. AWID suggests Model PCH049 housing from The Housing Company.

Mounting devices – Consult with supplier for utility boxes, adapter plates, poles, posts, pedestals, bollards, etc.

Installation Sheet – Download full instructions from AWID's web site <http://www.awid.com>.

CREDENTIALS

Proximity cards, keytags and wafers – AWID offers a selection of cards, keytags, hangtags and wafers for use with the MM-6800 reader.

OPERATING CHARACTERISTICS

Reading Distance:

With cards – Up to 8 inches (varies with mounting method, voltage applied to reader, and credential type)

Excitation Frequency:

Transmit and Receive - 125 kHz

Antenna Output:

Omni-directional low-frequency RF field

Indicators (Control by Reader and Panel):

LED – 3 colors, red-amber-green
Beeper – piezo-electric, 4 kHz tone

Power Supply:

+5 volts to +12 volts DC, linear, regulated
Current rating: 120 mA at 5 V, 200 mA at 12 V

Communication Protocols:

Wiegand electrical interface
RS-232 serial interface

Code Formats:

Determined by AWID's credentials programmed with 26 bits to 50 bits

Cable (for Wiegand Interface):

4 to 7 conductors (not twisted pairs), stranded, 22 gauge, color-coded, overall 100% shielded, plastic jacket; up to 500 ft

PHYSICAL CHARACTERISTICS

Dimensions:

6.0 x 1.75 x 1.0 inches (15.24 x 4.45 x 2.54 cm)

Weight:

6 ounces (170 g)

Material:

ABS 1-part enclosure, dark gray color
Epoxy resin potting at rear surface

Cable (Integrated with Reader):

10 conductors, 22 gauge, 18 inches long.
Overall shielded, gray plastic jacket

Mounting:

Door frame, window mullion, wall, cabinet

ENVIRONMENT

Operating Temperature:

-31° F to 150° F (-35° C to 65° C)

Operating Humidity:

0% to 95% non-condensing

Protection from Environment:

Use Lexan housing when reader must be removed from view or protected from damage.

Avoiding Interference:

Optimize reader performance by spacing or shielding reader from neighboring readers, including reader on other side of wall at door.

CERTIFICATION

ISO-9001:2000; FCC Part 15; IC; UL listed



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