PRODUCT CATALOG FOR ACCESS CONTROL

AWiD

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About AWID

Founded in 1997 and headquartered in Morgan Hill, California, AWID is a worldwide leading provider of RFID products, technologies, solutions and services providing the best features and benefits for Access control and Asset management applications. AWID is proud to be an RFID company with the tag line of "the RFID with Best ROI".

AWID Access Control product lines include LF (125 KHz), HF (13.56 MHz) and UHF (900 MHz) technologies. They address all needs of Automatic Vehicle Identification (AVI) applications, such as parking access and gate control, and Human Access Control, such as building or door access. AWID new products included in this catalog are the UA-612UHF door access reader as well as the Extra Long Range, LR-2000 Parking Access Reader.

This Product catalog for Access Control provides information on product descriptions, features and benefits, product specifications, as well as accessory and credential options.

They are detailed in the following categories:

- Sentinel-Prox Long Range Readers- LR-2000 readers and credentials for parking access applications using UHF technologies.
- Sentinel-Prox Proximity Readers- SR-2400, MM-6800, SP-6820 and KP-6840 for read ranges of 2 to 8 inches using LF technologies. SC-2300 for read ranges of 2 to 3 inches using HF technologies.
- Sentinel-Prox Medium Range Readers- MR-1824, MR-1824MC, MR-1824HiLo, and MR-1824HiLoMC for read ranges of 10 to 24 inches using LF technologies.
- Myriads of credentials for Proximity readers and credentials as well as accessories for Long Range Readers.

AWID sincerely appreciates your business and looks forward to supplying all of your access control needs.

LR-2000™
Sentinel-Prox™
Extra Long-Range Reader

AWID's Sentinel-Prox ™ Long-Range Reader - LR-2000 is a UHF RFID reader with an integrated fine-tuned antenna. The LR-2000 is optimally designed for Automatic Vehicle Identification (AVI) and Access Control applications such as parking entry and gate control. This LR-2000 Reader system also provides security-sensitive AWID proprietary encrypted vehicle UHF tags in a variety of types and styles. The LR-2000 integrated RFID reader-antenna system is ideal for outdoor AVI application as well as indoor applications such as asset monitoring and tracking. The system offers price/performance characteristics over traditional long-range proximity card systems. In addition, the LR-2000 can be used together with the UA-612 door access reader, allowing the same cards/tags to be used for both vehicle parking access AND building/door access!!!
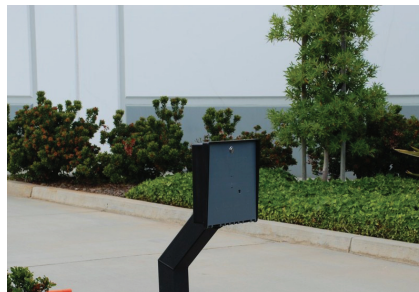
Reader installed inside housing

Operating in the license-free 900MHz UHF band, the LR-2000 is the first Access Control reader that combines the convenience of UHF technology with a programmable repetition rate and the Access Control industry's standard Wiegand format. It is manufactured in an ISO 9001:2000 certified facility providing the highest quality standard. This reader is furnished with an impressive combination of high styling and ranges from 8 feet to 15 feet, dependent on the type of tag. (see pg. 14 for chart). It offers Wiegand and RS-232 protocol interfaces with simultaneous data output, providing compatibility with all standard access control panels and systems.

Graphics Card

Features

- Read Ranges of 8 feet to 15 feet

- Compact package of 8 x 8 x 1.125 in.

- Programmable read repetition rate for one-shot or multiple reads

- Utilizes passive RFID technology; no battery required for tags

- Industry standard Wiegand and RS-232 data output

- Certified with FCC regulation

Benefits

- Superior read range performance for AVI and Access Control applications

- Integrated reader and antenna

- Ideal for outdoor applications*

- No programming required for standard installation

- Cost-effective UHF long read range passive tags

- Compatible with all standard Access Control Systems

- No FCC license required for users

- Easy installation with LR-2000 installation kit
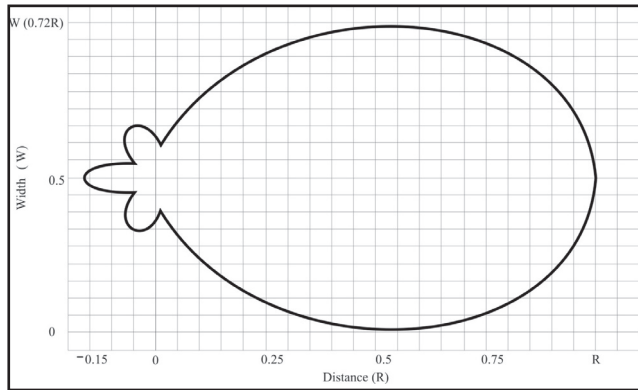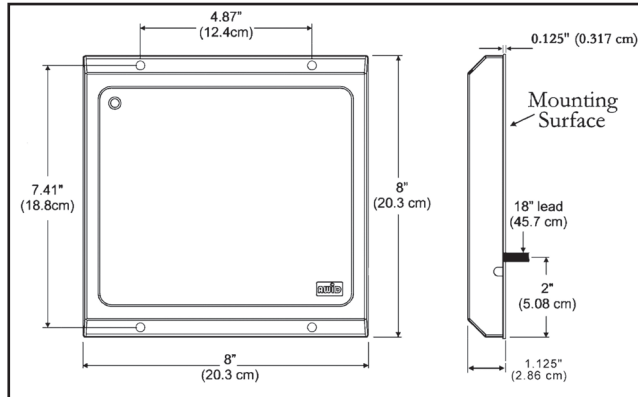
*NOTE: FOR OUTDOOR USE UNIT MUST BE INSTALLED IN MINIMUM IP64 RATED HOUSING

LR-2000™

Sentinel-Prox™ Long-Range Reader

Required Accessories

- PS-12-3.3 A(Power Supply) The PS-12-3.3A has output of 12 volts DC, 3 ampere capacity, regulated. It is suitable for powering the LR-2000 reader.

- LR-911MB (Mounting Bracket) The LR-911MB is specifically designed for use with the LR-2000 reader. This unit has a swivel bracket head that facilitates the aiming of the LR-2000 via flexible up/down and side/side movement. The LR-911MB can be mounted in either a horizontal or vertical position allowing for maximum flexibility.

- **LR-2000KIT (Installation Kit) It is essential and required for all installers to use the LR-2000KIT as a tool to assist in the setup and installation of all LR-2000 readers.**

Credential Options
- VT-UHF-0-0 - ProxLinc ™ UHF Visor Tag for vehicles.
- HT-UHF-0-0 - ProxLinc ™ UHF Hang Tag for rear view mirror
- CS-UHF-0-0 - ProxLinc ™ UHF Clamshell Badge.
- GR-UHF-0-0 - ProxLinc ™ UHF Graphics Card
- RV-UHF-0-0 - ProxLinc ™ UHF Rear View Mirror Tag
- WS-UHF-0-0 - ProxLinc ™ UHF Windshield Tag

See Pg. 14 for Read Ranges

SPECIFICATIONS

PERFORMANCE CHARACTERISTICS
Read Range:
8-15 feet (2.6-5.0 meters)
Frequency:
UHF band 902MHz to 928MHz for USA
(Contact AWID for other countries)
Antenna Type:
Circular Polarized
Voltage:
7-15V DC
Current:
0.4A - 1A
Communication protocol:
Wiegand and RS-232
Data Format:
Configurable 26 bit to 50 bit
Cable to Controller (Wiegand interface):
6 conductors stranded 22AWG or larger, color-coded insulation, overall 100% shield

PHYSICAL CHARACTERISTICS
Dimensions:
8x8x1.125in (20.32x20.32x2.85cm)
Weight:
37.5oz (1.06kg)
Color:
Beige housing on aluminum plate
Mounting:
Easy setup via mounting bracket accessory (p/n LR-911MB)

ENVIRONMENTAL
Operating Temperature:
-13F° to 140°F (-25 °C to 60 °C)
Operating Humidity:
0-95% non-condensing
Regulatory:
FCC Part 15
Industry Canada
Note:
Unit is splash proof, not water resistant

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LR-2000HiLoMA™
Sentinel-Prox™
Long-Range Reader

AWID's Sentinel-Prox™ Long Range Reader LR-2000 HiLo MA is an extended two-antenna version of the LR-2000 product family. It consists of a special master LR-2000 reader unit connected to an external antenna via a coaxial cable. The LR-2000 is optimally designed for Automatic Vehicle Identification (AVI) and Access Control applications such as parking entry and gate control.

The LR-2000 HiLo MA also provides security-sensitive AWID proprietary encrypted tags of various types. These credentials are ideal for outdoor AVI application as well as indoor applications such as asset monitoring and tracking. (See page 14 for chart of read ranges)

"Visor Tag"

Beyond the features and benefits provided by the LR-2000, the LR-2000HiLo MA is used to spread out the effective RF field so that it covers a larger continuous area, either vertically or horizontally. Although the read range stays the same as the LR-2000, the cross-section of the field becomes larger, thus offering greater advantages for the following conditions:

- When the application requires access control of both tall and short vehicles, such as Semi-Trucks and/or typical cars, the LR-2000 HiLo MA vertically spreads the RF field between the reader and antenna.

- To account for wider vehicle entrance lanes, the readers can be aimed to widen the RF field horizontally at the tag reading area.

- If the vehicle lane is turning as it approaches the tag-reading zone, the LR-2000 HiLo MA spreads the reading field, increasing the reliability of tag reading.

Features

- RFID reader system with Dual Antennas

- Long read range of 8 feet to 15 feet

- Programmable read repetition rate for one-shot or multiple reads

- Two compact packages of 8 x 8 x 1.125 inches each

- Utilizes passive RFID technology; no battery required for tags

- Industry standard Wiegand and RS-232 data output.

- Certified with FCC regulation

Benefits

- Superior performance read range for AVI and Access Control applications

- Greater field coverage either vertically or horizontally

- Ideal for outdoor applications*

- No programming required for standard installation

- Cost-effective passive tags

- Compatible with all standard Access Control systems

- No FCC license required for users

- Easy installation using LR-2000 installation kit
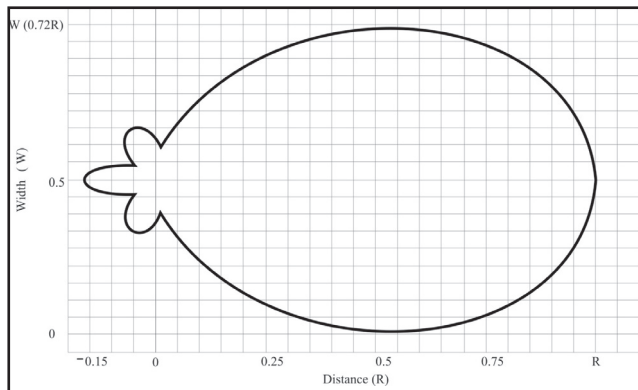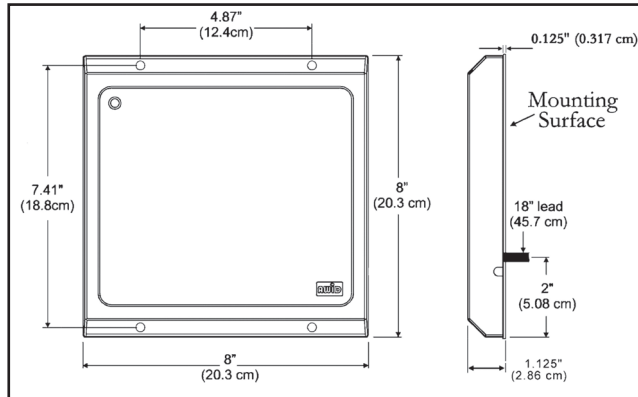
*NOTE: FOR OUTDOOR USE UNIT MUST BE INSTALLED IN MINIMUM IP64 RATED HOUSING

LR-2000HiLoMA™

Sentinel-Prox™ Long-Range Reader

Required Accessories

- PS-12-3.3A (Power Supply) The PS-12-3.3A has output of 12 volts DC, 3 ampere capacity, regulated. It is suitable for powering the LR-2000HiLo reader.

- LR-911MB (Mounting Bracket) The LR-911MB is specifically designed for use with the LR- series readers. This unit has a swivel bracket head that facilitates the aiming of the LR-2000 via flexible up/down and side/side movement. The LR-911MB can be mounted in either a horizontal or vertical position allowing for maximum flexibility.

- **LR-2000 KIT (Installation Kit) It is essential and required for all installers to use the LR-2000 KIT as a tool to assist in the setup and installation of all LR-2000 installations**

Credential Options

- VT-UHF-0-0 - ProxLinc ™ UHF Visor Tag for vehicles.
- HT-UHF-0-0 - ProxLinc ™ UHF Hang Tag for rear view mirror
- CS-UHF-0-0 - ProxLinc ™ UHF Clamshell Badge.
- GR-UHF-0-0 - ProxLinc ™ UHF Graphics Card
- RV-UHF-0-0 - ProxLinc ™ UHF Rear View Mirror Tag
- WS-UHF-0-0 - ProxLinc ™ UHF Windshield Tag

Specifications- Master unit (Specially configured LR-2000)

PERFORMANCE CHARACTERISTICS
Read Range:
8-15 feet (2.6-5.0 meters)
Frequency:
UHF band 902MHz to 928MHz for USA (Contact AWID for other countries)
Antenna Type:
Circular Polarized
Communication protocol:
Wiegand and RS-232
Data Format:
Configurable 26 bit to 50 bit
Cable to Controller (Wiegand interface):
6 conductors stranded 22AWG or larger, color-coded insulation, overall 100% shield

PHYSICAL CHARACTERISTICS
Dimensions:
8x8x1.125in (20.32x20.32x2.85cm)
Weight:
37.5oz (1.06kg)
Color:
Beige housing on aluminum plate
Mounting:
Easy setup via mounting bracket accessory (p/n LR-911MB)

ENVIRONMENTAL
Operating Temperature:
-13F° to 140°F (-25 °C to 60 °C)
Operating Humidity:
0-95% non-condensing
Regulatory:
FCC Part 15
Industry Canada
Note:
Unit is splash proof, not water resistant

Specifications - Antenna Unit
Physical Characteristics- Same as internal antenna of LR-2000
Weight- 32 oz. (0.91 kg)

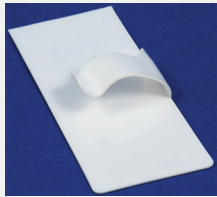Applied Wireless Identifications Group, Inc.
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AWID
The RFID with Best ROI™

Credentials for LR-2000 Proximity Readers

Prox-Linc™ VT-UHF-0-0 Visor Tag

- Contains UHF proximity technology laminated tag
- Clips easily to visor
- Custom printing options available w/ multi-colors, logos and designs on front
- Dimensions 5.5" x 2.125" x 0.054"

Prox-Linc™ HT-UHF-0-0 Hang Tag

- Contains proximity technology in a rugged laminated hang tag
- 7.25in long x 2in wide to hang from rear view mirror
- Custom printed multi-colors, logos and designs available on front and/or back
- Visual compliance, proximity and UHF technology in one credential

Prox-Linc™ CS-UHF-0-0 Clamshell Badge

- Standard ISO Clamshell Style Prox Badge
- Credit Card Size with Beveled Edges
- Customizable with your logo on the front!
- Accepts Photo Flap and Self Adhesive Badge Overlays
- Pre-Punched in Portrait Orientation

Prox-Linc™ GR-UHF-0-0 Graphics Card

- Graphics Quality Prox Card for ID's
- ISO Compliant Thickness for Badging
- Customizable Graphics Quality on Both Sides!
- White, Fine Matte Finish
- Available with Magnetic Strip (GRMAG-UHF-0-0)

Prox-Linc™ RV-UHF-0-0 Rear View Tag

- Adhesive Backing for Simple Installation
- Installed on Drivers Side Rear View Mirror
- Black Finish to Blend with Mirror Housing
- Customizable Graphics Available

Prox-Linc™ WS-UHF-0-0 Windshield Tag

- Smaller Than a Business Card
- True Hands-Free Access Control
- Customizable Graphics Available
- Circuit Printed on Flexible, Clear Plastic

*Must be placed by Installer

Technology:

Security:

Proprietary encryption used to protect card data.

The Prox-Linc™ cards / tags can be programmed with up to 72,058 trillion unique codes

Long Life:

No direct contact, no battery, capable of an infinite number of reads to assure years of maintenance free operation

Custom Formats:

Custom programmable Wiegand format up to 50 user definable bits insures security, compatibility and minimal lead times.

Frequency:

902-928MHz - Passive

Operating Temperature:

- 31° to 150° F (-35 to 65° C)

Operating Humidity:

0-95% non-condensing

Required Information for Ordering:

- Bit Format
- Facility/Site Code
- Sequence Numbers

Accessories for LR-2000

The LR-2000KIT is the mandatory test & setup Kit required to successfully install the AWID LR-2000 parking access reader. All install kits include the following in its own ruggedized carrying case:

- Customized LR-2000 reader with mounting straps, allows set up and testing in various placements to determine best read range and vehicle approach
- SP-6820-LR test unit with LED, beeper and cable, allows visual and audible indicator of successful tag reads when setting up and testing
- PS-12-3.3A power supply, 12V 3.3A
- CS-UHF-0-0 UHF Clamshell Badge
- GR-UHF-0-0 UHF Graphics Quality Badge
- VT-UHF-0-0 UHF Visor Tag
- HT-UHF-0-0 UHF Hang Tag
- RV-UHF-0-0 UHF Rear View Mirror Tag
- WS-UHF-0-0 UHF Windshield Tag
- UHF Detector. Detects frequencies from 50 MHz to 3GHz

The LR-2000 Installation Kit must be used for all installations of the LR-2000 reader and tags.

LR-911MB

The LR-911MB Mounting Bracket is specifically designed for use with the LR series readers including the LR-2000. The LR-911MB has an adjustable head which facilitates the aiming of the LR readers via flexible up/down and side/side movement. The LR-911MB can be mounted in either a vertical or horizontal position allowing for maximum flexibility

PS-12-3.3A

The PS-1233A has output of 12 volts DC, 3 ampere capacity, which is suitable for powering the LR-2000 reader.

MR-1824™ and MR-1824MC™
Sentinel-Prox™
Medium Range Reader

AWID's MR-1824 Sentinel-Prox Medium-Range LF Reader is a mid-range proximity reader at an economical price. With an industry best read range of 18 to 24 inches, it eliminates the need to get the card close to the reader, with no more misreads or fumbling. It delivers exceptional value without compromise on quality, durability, and performance for both indoor and outdoor applications.

The MR-1824MC is a Metal Compensated version of MR-1824 to allow flexible mounting applications to metal surfaces by adhering four ferrite plates (4x4x0.25 in and 8 oz. each) to the back of MR-1824.

The MR-1824 reader is a fully featured Wiegand and RS-232 compatible reader with an LED and Annunciator for both small and large volume OEM and Dealer installations. It is designed to mount on the surface of an interior or exterior wall. An excellent choice for large doors such as hospital emergency rooms or loading docks!

The MR-1824's attractive enclosure comes in dark gray. Its electronics are potted in UL-approved epoxy resin potting compound to seal them against adverse environmental conditions. It is manufactured in an ISO 9001:2000 certified facility providing for the highest quality standard.

When a valid card/tag is presented within the reader's field, the reader's LED momentarily turns AMBER and the beeper sounds to indicate that a data transmission took place. If the card/tag stays within the reader's field, the LED will blink RED/GREEN to indicate that the reader is functioning properly.

The reader has a re-present mode in which the card must be taken from the reader field before being read again. This feature eliminates multiple reads from a single card presentation.

Features

- Read range of 18 to 24 inches

- Metal compensation available for mounting on metal surfaces

- Electronics potted with epoxy compound for demanding environmental applications

- LED for visual feedback, Piezo beeper for audio feedback

- Compatible with all Wiegand access control systems

- Industry standard Wiegand (26 to 50 bit) output and RS-232 interface

- Attractive high-tech enclosure with dark gray

Benefits

- Medium read range for parking lot access and building access control applications requiring mid-range read

- MR-1824MC is ideal for applications requiring mounting on metal surfaces

- Reader electronics protected against application elements to assure long reader life

- Visual and Audible indicators providing dependable user feedback and guidance for quick and easy installation

- Wiegand output compatible with all access control panels, allowing the stocking of one reader for all applications and credential requirements.

See Pg. 14 for Read Ranges

NOTE: FOR OUTDOOR USE UNIT MUST BE INSTALLED IN MINIMUM IP64 RATED HOUSING

MR-1824™ and MR-1824MC™

Sentinel-Prox™ Medium Range Reader

4.87"
(12.4cm)

7.41"
(18.8cm)

8"
(20.3 cm)

18" lead
(45.7 cm)

1.75"
(4.45 cm)

2"
(5.08 cm)

8"
(20.3 cm)

1.5"
(3.81 cm)

Left and right hand mounting available.

MR-1824 Reader

Panel's Reader Port

cable shield

Receive	(Orange)	} tape singly	+ DC Power
Transmit	(Violet)		Ground
Hold	(Blue)	} connect if used	Hold
Beeper	(Yellow)		Beeper
LED	(Brown)		LED
Data-1	(White)		Data-1
Data-0	(Green)		Data-0
5-12 VDC	(Red)		
Ground	(Black)		
Drain	(Clear)		

Ferrite clamp

Independent Power Supply

wire 2 turns

+5 to +12 VDC
Ground

earth ground at panel

Credential Options

• HT-CUSTOM - ProxLinc ™ Hang Tag for rear view mirror, available in 7" lengths.

• CS – Standard Clamshell Style Prox Badge, Credit Card Size with Beveled Edges, Pre-Punched in Portrait Orientation, Accepts Photo-Flap and Self-Adhesive Badge Overlays.

• GR – Graphics Quality Prox Card, ISO Compliant Thickness for Badging Graphics Quality, Both Sides Printable. Portrait or Landscape Punch Capability. Available with Magnetic Stripe (GRMAG).

• KT – Stylish Prox Key Tag. Designed to Fit on Key ring/chain. Triangular Design for comfortable holding. ABS Construction for High-Endurance.

• PW – One inch Diameter Disc Prox Wafer. Transform any Credential (Laminated ID badge, Magnetic Stripe Card, Bar Coded ID Card, Swipe Card, Barium Ferrite Card, Drivers License, etc) into an AWID compatible Prox Card instantly.

Specifications

PERFORMANCE CHARACTERISTICS

Read Range:
10-24 inch (46- 61 cm)
Transmitting Frequency:
125 kHz
Voltage:
5-12 VDC
Current:
250-600 mA
Audio alarm:
4 kHz burst
Communication protocol:
Wiegand, with interface cable up to 500 ft long and RS-232
Data Format:
Configurable 26 bit to 50 bit (determined by code in credentials)
Cable to Controller (Wiegand interface):
5 conductors stranded, 18 AWG, color-coded insulation, overall 100% shield

PHYSICAL CHARACTERISTICS

Dimensions:
8x8x1.5 inch (20.3x20.3x3.81 cm) for MR-1824;
8x8x1.75 inch (20.3x20.3x4.44 cm) for MR-1824MC
Weight:
25 oz. (709 g) for MR-1824; 57 oz. (1,617 g) for MR-1824MC
Color:
Dark Gray

ENVIRONMENTAL

Operating Temperature:
-31F° to 150°F (-35 °C to 65 °C)
Operating Humidity:
0-95% non-condensing
Regulatory:
FCC Part 15
Industry Canada
UL Listed
Note:
Unit is splash proof, not water resistant

MR-1824HiLo™ & HiLoMC™
Sentinel-Prox™
Medium Range Reader

AWID's MR-1824HiLo Sentinel-Prox Medium-Range Reader is a two-unit extension of the MR-1824 family. With special programming for a pair of MR-1824, the MR-1824HiLo works in pairs at a single installation site without interference between the set of two readers. This prevents one reader from transmitting its signal while the other reader is transmitting to, or receiving a reply, from an AWID credential. The MR-1824HiLo has an industry best 18-24 inches read range working as a set of MR-1824 readers.

The MR-1824HiLoMC is a Metal Compensated version of MR-1824HiLo to allow flexible mounting applications to metal surfaces by adhering four ferrites (4x4x0.25 in and 8 oz. each) to the back of each MR-1824 of MR-1824HiLo.

The MR-1824HiLo reader is a fully featured Wiegand and RS-232 compatible reader with an LED and Annunciator for both small and large volume OEM and Dealer installations. It is designed to mount on the surface of an interior or exterior wall.

The MR-1824HiLo's attractive enclosure comes in dark gray. Its electronics are potted in UL-approved epoxy resin potting compound to seal them against adverse environmental conditions. It is manufactured in an ISO 9001:2000 certified facility providing for the highest quality standard.

When a valid card/tag is presented within the reader's field, the reader's LED momentarily turns AMBER and the beeper sounds to indicate that a data transmission took place. If the card/tag stays within the reader's field, the LED will blink RED/GREEN to indicate that the reader is functioning properly.

The reader has a re-present mode in which the card must be taken from the reader field before being read again. This feature eliminates multiple reads from a single card presentation.

Features

- Read range of 18 to 24 inches for each MR-1824HiLo reader

- Metal compensation available for mounting on metal surfaces

- Electronics potted with epoxy compound for demanding environmental applications

- LED for visual feedback, Piezo beeper for audio feedback

- Compatible with all Wiegand access control systems; RS-232 interface for special controllers

- Industry standard Wiegand (26 to 50 bit) output

- Attractive dark gray high-tech enclosure

Benefits

- Medium read range for parking lot access and other building control applications requiring two mid-range readers.

- MR-1824HiLoMC is ideal for applications requiring mounting on metal surfaces

- Reader electronics protected against application elements to assure long reader life.

- Visual and Audible indicators providing dependable user feedback and guidance for quick and easy installation.

- Wiegand output compatible with all access control panels, allowing the stocking of one reader for all applications and credential requirements.

NOTE: FOR OUTDOOR USE UNIT MUST BE INSTALLED IN MINIMUM IP64 RATED HOUSING

MR-1824HiLo™ & MR-1824HiLoMC™

Sentinel-Prox™ Medium Range Reader

4.87" (12.4cm)
7.41" (18.8cm)
8" (20.3 cm)
8" (20.3 cm)
1.75" (4.45 cm)
18" lead (45.7 cm)
2" (5.08 cm)
1.5" (3.81 cm)
Left and right hand mounting available.

READER M (MASTER)
BEEPER (YELLOW)
RECEIVE (ORANGE)
TRANSMIT (VIOLET)
(BLUE)
LED (BROWN)
DATA1 (WHITE)
DATA0 (GREEN)
GROUND (BLACK)
5-12 VDC (RED)
SHIELD (DRAIN)

PANEL
shield
LED
DATA1
DATA0
GROUND
POWER
CHASSIS GROUND

READER S (SLAVE)
BEEPER (YELLOW)
RECEIVE (ORANGE)
TRANSMIT (VIOLET)
(BLUE)
LED (BROWN)
DATA1 (WHITE)
DATA0 (GREEN)
GROUND (BLACK)
5-12 VDC (RED)
SHIELD (DRAIN)

EARTH GROUND AT PANEL

POWER SUPPLY
GROUND
+12 VDC

Credential Options

- HT-CUSTOM - ProxLinc ™ Hang Tag for rear view mirror, available in 7" lengths.

- CS – Standard Clamshell Style Prox Badge, Credit Card Size with Beveled Edges, Pre-Punched in Portrait Orientation, Accepts Photo-Flap and Self-Adhesive Badge Overlays.

- GR – Graphics Quality Prox Card, ISO Compliant Thickness for Badging Graphics Quality, Both Sides Printable. Portrait or Landscape Punch Capability. Available with Magnetic Stripe (GRMAG).

- KT – Stylish Prox Key Tag. Designed to Fit on Key ring/chain. Triangular Design for comfortable holding. ABS Construction for High-Endurance.

- PW – One inch Diameter Disc Prox Wafer. Transform any Credential (Laminated ID badge, Magnetic Stripe Card, Bar Coded ID Card, Swipe Card, Barium Ferrite Card, Drivers License, etc) into an AWID compatible Prox Card instantly. Eliminate the Expense and Hassles of Re-Badging your Employees.

SPECIFICATIONS

PERFORMANCE CHARACTERISTICS
Read Range:
18-24 inch (46- 61 cm)
Transmitting Frequency:
125 kHz
Voltage:
5-12V DC
Current:
250-600 mA
Audio alarm:
4 kHz burst
Communication protocol:
Wiegand, with interface length up to 500 ft.
Data Format:
Configurable 26 bit to 50 bit (determined by code in credentials)
Cable to Controller (Wiegand interface):
5 conductors stranded, 22AWG, color-coded insulation, overall 100% shield

PHYSICAL CHARACTERISTICS
Dimensions:
Two MR-1824 of 8x8x1.5 inch (20.3x20.3x3.81 cm) in a set of MR-1824HiLo;
Two MR-1824MC 8x8x1.75 inch (20.3x20.3x4.44 cm) in a set of MR-1824HiLoMC
Weight:
Two MR-1824 of 25 oz. (709 g) in a set of MR-1824HiLo;
Two MR-1824MC of 57 oz. (1,617 g) in a set of for MR-1824HiLoMC
Color:
Dark Gray

ENVIRONMENTAL
Operating Temperature:
-31F° to 150°F (-35 °C to 65 °C)
Operating Humidity:
0-95% non-condensing
Regulatory:
FCC Part 15
Industry Canada
UL Listed
Note:
Unit is splash proof, not water resistant

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LR-2000 & MR-1824 Vehicle Access Control Tag Application Read Ranges

LR-2000 VEHICLE ACCESS CONTROL READER-TAG APPLICATION READ RANGES

Description	Vehicle Access Control-Minimum Guaranteed Read Range				Vehicle Access Control-Minimum Guaranteed Read Range (Tag can be used for both parking and door access using UA-612 Door Reader)	
	Rear View Mirror Tag	Windshield Tag	Visor Tag	Hang Tag	Graphics Card	Clam Shell
LR-2000 with 7' Ebony, Vehicle Pedestal w/ Lexan Polycarbonate Box	10'	10'	10'	10'	N/A	N/A
LR-2000 with 4.5' Ebony, Straight Pedestal, Intercom w/ Keypad Box	10'	10'	15'	15'	9'	9'
LR-2000 with 4.5' Ebony, Straight Pedestal w/Lexan Polycarbonate Box	10'	10'	15'	15'	9'	9'
LR-2000 with 4' Ebony, Architectural Pedestal, Intercom w/ Keypad Box	10'	10'	15'	15'	9'	9'
LR-2000 with 4' Ebony, Architectural Pedestal, w/ Lexan Polycarbonate Box	10'	10'	15'	10'	9'	9'
LR-2000 with Metal Housing with Intercom and Integrated Keypad	10'	10'	10'	10'	9'	9'
LR-2000 with Lexan Polycarbonate Housing 14"x14"x4"	10'	10'	10'	10'	9'	9'

NOTE: Contact Factory for Application support regarding Windshield Tags and Availability/Application support regarding Metal Tags for mounting on outside of vehicle

MR-1824 VEHICLE ACCESS CONTROL READER-TAG APPLICATION READ RANGES

Description	Vehicle Access Control-Minimum Guaranteed Read Range		Vehicle Access Control-Minimum Guaranteed Read Range (Tag can be used for both parking and door access using LF Door Readers)	
	Visor Tag	Hang Tag	Graphics Card	Clam Shell
MR-1824 with 4.5' Ebony, Straight Pedestal, Intercom w/ Keypad Box	10" - 24"	10" - 24"	10" - 24"	10" - 24"
MR-1824 with 4.5' Ebony, Straight Pedestal w/Lexan Polycarbonate Box	10" - 24"	10" - 24"	10" - 24"	10" - 24"
MR-1824 with 4' Ebony, Architectural Pedestal, Intercom w/ Keypad Box	10" - 24"	10" - 24"	10" - 24"	10" - 24"
MR-1824 with 4' Ebony Architectural Pedestal, w/ Lexan Polycarbonate Box	10" - 24"	10" - 24"	10" - 24"	10" - 24"
MR-1824 with Metal Housing with Intercom and Integrated Keypad	10" - 24"	10" - 24"	10" - 24"	10" - 24"
MR-1824 with Lexan Polycarbonate Housing 14"x14"x4"	10" - 24"	10" - 24"	10" - 24"	10" - 24"

NOTE: Contact Factory for Application support regarding Windshield Tags and Availability/Application support regarding Metal Tags for mounting on outside of vehicle

Metal Housing w/ Intercom & Keypad

Lexan Polycarbonate

Architectural Style

Straight Style

Vehicle Pedestal

See Page 15 for Pedestal, Mounting Pole and Housing Ordering Information

Pedestals, Mounting Poles and Housing Supplier Partners

DOORKING

Architectural Style
p/n 1200-037

Straight Style
p/n 1200-150

Metal Housing w/ Intercom & Keypad
p/n 1803 Surface

Pedestals and Housing are recommended with the following AWID products:

- LR-2000
- LR-911
- MR-1824
- UA-612

DOORKING
120 S . Glasgow Avenue
Inglewood, CA 90301
800-826-7493
www.doorking.com

THE HOUSING COMPANY

Vehicle Pedestal
p/n PS094-AVIB

Lexan Polycarbonate
Housing p/n PCH196

Pedestals and Housing are recommended with the following AWID products:

- LR-2000
- LR-911
- MR-1824
- UA-612

THE HOUSING COMPANY
9651 Chalma St.
Baton Rouge, LA 70814
770-529-1040
www.thehousingcompany.com

PEDESTAL CEO

Architectural Style
p/n HD-DK

Pedestals and Housing are recommended with the following AWID products:

- LR-2000
- LR-911
- MR-1824
- UA-612

PEDESTAL CEO
561 Wilderness Dr.
Alpine, UT 84004
800-660-3072
www.pedestalceo.com

AWiD

The RFID with Best ROI™

SC-2300™
Sentinel-Prox™
HF Smart Card Reader

AWID's SC-2300 HF Sentinel-Prox Smart Card Reader is a new generation of contactless multi-protocol smart-card/smart-label High Frequency reader. It is capable of reading ISO-14443A, ISO-14443B, Mifare, ISO-15693 (Smart Label), ASK protocol and other protocols. With a read range of 2 to 3 inches, the SC-2300 delivers exceptional value without compromise on quality, durability, and performance for both indoor and outdoor applications.

The SC-2300 reader is a fully featured Wiegand and RS-232 compatible reader with an LED and Annunciator for both small and large volume OEM and Dealer installations. It is designed to mount on a standard-single-gang electric wall-box or on the surface of an interior or exterior wall.

The SC-2300's attractive enclosure comes in dark gray. Its electronics are potted in UL-approved epoxy resin potting compound to seal them against adverse environmental conditions. It is manufactured in an ISO 9001:2000 certified facility providing for the highest quality standard.

When a valid card/tag is presented within the reader's field, the reader's LED momentarily turns AMBER and the beeper sounds to indicate that a data transmission took place. If the card/tag stays within the reader's field, the LED will blink RED/GREEN to indicate that the reader is functioning properly.
The reader has a re-present mode in which the card must be taken from the reader field before being read again. This feature eliminates multiple reads from a single card presentation.

Features

- Read range of 2 to 3 inches

- HF Smart card technology, no contact required

- Support ISO-14443A or B, Mifare, ISO-15693, ASK and other protocols

- Electronics potted with epoxy compound for demanding environmental applications

- LED for visual feedback, Piezo beeper for audio feedback

- Compatible with all Wiegand access control systems

- Industry standard Wiegand output and RS-232 interface

- Attractive high-tech enclosure in dark gray

Benefits

- Ease of use and entry. Assures long life of cards by eliminating need to physically swipe card against reader

- Elegantly and beautifully mounted

- For Smart Card, Smart Label High Frequency Contact less applications

- Reader electronics protected against application elements to assure long reader life

- Visual and Audible indicators providing dependable user feedback and guidance for quick and easy installation

- 26 to 50 bit Wiegand output allows use of multiple control panels allowing stocking of one reader for all applications and credential requirements

NOTE: FOR OUTDOOR USE UNIT MUST BE INSTALLED IN MINIMUM IP64 RATED HOUSING

SC-2300™

Sentinel-Prox™ Smart Card Reader


```
READER                                          PANEL

BEEPER      (YELLOW)  ⟍
RECEIVE     (ORANGE)   }  cut
TRANSMIT    (VIOLET)   }  and      shield
HOLD        (BLUE)    ⟋   tape
LED         (BROWN)                         LED
DATA1       (WHITE)                         DATA1
DATA0       (GREEN)                         DATA0
GROUND      (BLACK)                         GROUND
5-12 VDC    (RED)                           POWER
SHIELD      (DRAIN)                         CHASSIS GROUND

                    EARTH  GROUND
                       AT PANEL
```
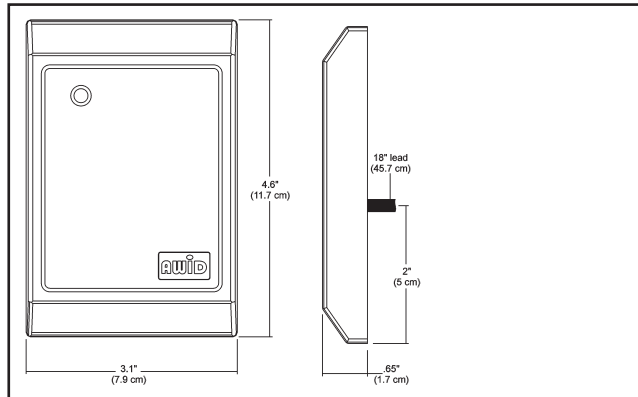
Protocols

- ISO-14443A

- ISO-14443B

- Mifare

- ISO-15693 (Smart Label)

- ASK protocol

SPECIFICATIONS

PERFORMANCE CHARACTERISTICS
Read Range:
2-3 inches (5~7.5 cm)
Transmitting Frequency:
13.56 MHz
Voltage:
5-12 VDC
Current Requirement:
5 VDC @ 90 mA
12 VDC @ 110 mA
Audio Alarm:
4 kHz burst
Communication Interface:
 Wiegand™ and RS-232
Data Format:
26 bits to 50 bits (as programmed in the cards or tags)
Cable to Controller (Wiegand interface)
5 conductors stranded 22 AWG or larger, color-coded insulation, overall 100% shield

PHYSICAL CHARACTERISTICS
Dimension:
3.1x4.6x0.65in (7.9x11.7x1.7 cm)
Weight:
8 oz.. (227 g)
Color:
Dark gray

ENVIRONMENTAL
Operating Temperature:
-31F° to 150°F (-35 °C to 65 °C)
Operating Humidity:
0-95% non-condensing
Regulatory:
FCC Part 15
Industry Canada
CE mark
Note:
Unit is splash proof, not water resistant

Applied Wireless Identifications Group, Inc.
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www.awid.com

AWID

SR-2400™
Sentinel-Prox™
Proximity Reader

AWID's SR-2400 Sentinel-Prox™ Proximity Reader is the Value leader for Access Control applications. With a read range of 4 to 5.5 inches, the SR-2400 delivers exceptional value without compromise on quality, durability, and performance.

The SR-2400 reader is a fully featured Wiegand compatible reader with an LED and Annunciator for both small and large volume OEM and Dealer installations. The SR-2400 reader is metal compensated, resulting in minimal loss of read range when mounted on a metal mullion providing ease of installation in various door access applications.

The SR-2400's attractive, slim line enclosure comes in dark gray or beige color. It may be mounted on a metal door frame, a window mullion or directly to an interior or exterior wall or cabinet. The SR-2400's electronics are encapsulated in UL-approved epoxy resin potting compound to seal them against adverse environmental conditions.

When a valid card/tag is presented within the reader's field, the reader's LED momentarily turns AMBER and the beeper sounds to indicate that a data transmission took place. If the card/tag stays within the reader's field, the LED will blink RED/GREEN to indicate that the reader is functioning properly.

The reader has a re-present mode in which the card must be taken from the reader field before being read again. This feature eliminates multiple reads from a single card presentation

Features

- Read range of 4 to 5.5 inches

- High value leader

- Electronics potted with epoxy compound for demanding environmental applications

- LED for visual feedback, Piezo beeper for audio feedback

- Compatible with all Wiegand access control systems

- Industry standard Wiegand (26 to 50 bit) output

- Attractive high-tech enclosure with dark gray or beige color

- Sleek Metal compensated reader housing for mounting to metal door or window frames

Benefits

- Ease of use and entry. Assures long life of cards by eliminating need to physically swipe card against reader

- Very cost effective; compact size with great reading distance

- Reader electronics protected against application elements to assure long reader life.

- Visual and Audible indicators providing dependable user feedback and guidance for quick and easy installation

- Wiegand output allows use of multiple control panels allowing stocking of one reader for all applications and credential requirements

- Metal compensated housing provides trouble free mounting versatility for most access/entry applications

SR-2400™

Sentinel-Prox™ Proximity Reader
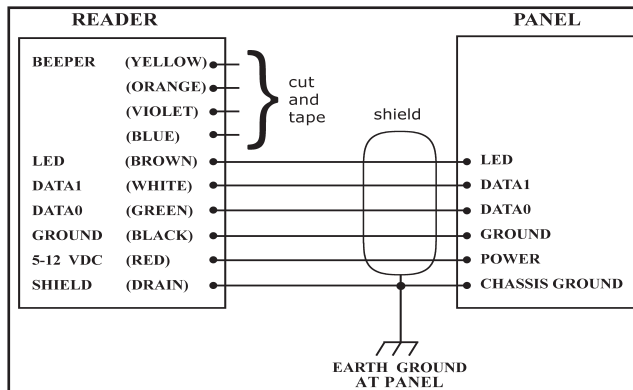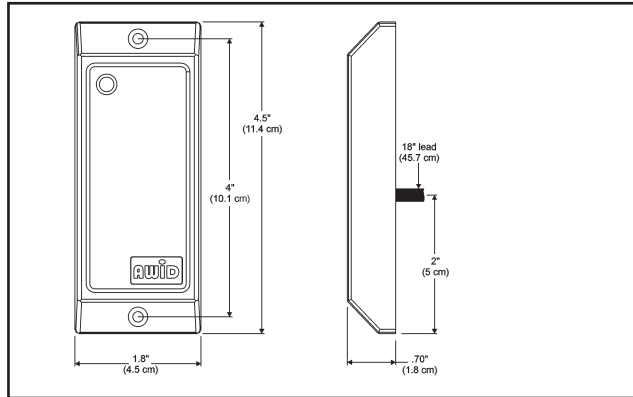
Credential Options

- CS – Standard Clamshell Style Prox Badge, Credit Card Size with Beveled Edges, Pre-Punched in Portrait Orientation, Accepts Photo-Flap and Self-Adhesive Badge Overlays. 4-5.5in Read Ranges.

- GR – Graphics Quality Prox Card, ISO Compliant Thickness for Badging Graphics Quality, Both Sides Printable. Portrait or Landscape Punch Capability. Available with Magnetic Stripe (GRMAG). 4-5.5in Read Ranges.

- KT – Stylish Prox Key Tag. Designed to Fit on Key ring/chain. Triangular Design for comfortable holding. ABS Construction for High-Endurance. 3-4in Read Ranges.

- PW – One inch Diameter Disc Prox Wafer. Transform any Credential (Laminated ID badge, Magnetic Stripe Card, Bar Coded ID Card, Swipe Card, Barium Ferrite Card, Drivers License, etc) into an AWID compatible Prox Card instantly. Eliminate the Expense and Hassles of Re-Badging your Employees.

SPECIFICATIONS

PERFORMANCE CHARACTERISTICS
Read Range:
4 to 5.5 inch (10-14 cm)
Transmitting Frequency:
125 kHz
Voltage:
5-12V DC
Current:
40-70 mA
Audio alarm:
4 kHz burst
Communication protocol:
Wiegand, with interface length up to 500 ft
Data Format:
Configurable 26 bit to 50 bit (determined by code in credentials)
Cable to Controller (Wiegand interface):
5 conductors stranded #22AWG, color-coded insulation, overall 100% shield

PHYSICAL CHARACTERISTICS
Dimensions:
1.8x4.5x0.7 in (4.5x11.4x1.8 cm)
Weight:
4 oz. (113 g)
Color:
Dark Gray or Beige

ENVIRONMENTAL
Operating Temperature:
-31F° to 150°F (-35 °C to 65 °C)
Operating Humidity:
0-95% non-condensing
Regulatory:
FCC Part 15
Industry Canada
UL Listed

Note:
Unit is splash proof, not water resistant

DISCLAIMER: Specifications subject to change without notice. AWID reserves the right to make changes to improve performance without impacting form, fit or function. The SR-2400, Sentinel Prox and Prox Linc are Trademarks of Applied Wireless Identifications Group, Inc.

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MM-6800™
Sentinel-Prox™
Proximity Reader

AWID's Sentinel-Prox™ Proximity Reader MM-6800™ is specially designed for mullion mount of various Access Control applications. With a read range of 6 to 8 inches, the MM-6800 delivers exceptional value without compromise on quality, durability, and performance for both indoor and outdoor applications.

The MM-6800 reader is a fully featured Wiegand and RS-232 compatible reader with an LED and Annunciator for both small and large volume OEM and Dealer installations. The MM-6800 reader is metal compensated, resulting in minimal loss of read range when mounted on a metal mullion providing ease of installation in various door access applications.

The MM-6800's attractive, slim line enclosure comes in dark gray or beige color. It may be mounted on a metal door frame, a window mullion or directly to an interior or exterior wall or cabinet. The MM-6800's electronics are encapsulated in an UL-approved epoxy resin potting compound to seal them against adverse environmental conditions. It is manufactured in an ISO 9001:2000 certified facility providing for the highest quality standard.

When a valid card/tag is presented within the reader's field, the reader's LED momentarily turns AMBER and the beeper sounds to indicate that a data transmission took place. If the card/tag stays within the reader's field, the LED will blink RED/GREEN to indicate that the reader is functioning properly.

The reader has a re-present mode in which the card must be taken from the reader field before being read again. This feature eliminates multiple reads from a single card presentation.
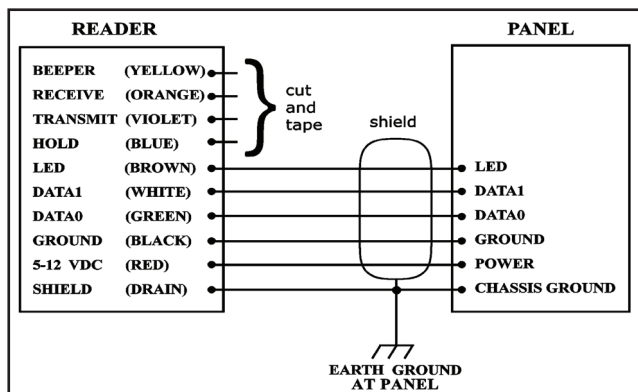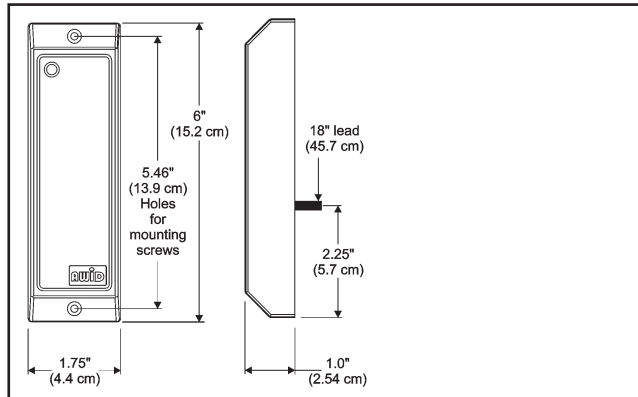
Features

- Read range of 6 to 8 inches

- Specially designed for mullion mount

- Electronics potted with epoxy compound for demanding environmental applications

- LED for visual feedback, Piezo beeper for audio feedback

- Compatible with all Wiegand access control systems

- Industry standard Wiegand (26 to 50 bit) output and RS-232 interface

- Attractive high-tech enclosure with dark gray or beige color

- Sleek Metal compensated reader housing for mounting to metal door or window frames

Benefits

- Ease of use and entry. Assures long life of cards by eliminating need to physically swipe card against reader

- Easy mounting for mullion applications

- Reader electronics protected against application elements to assure long reader life.

- Visual and Audible indicators providing dependable user feedback and guidance for quick and easy installation

- Wiegand output allows use of multiple control panels allowing stocking of one reader for all applications and credential requirements

- Choice of color matching settings

- Metal compensated housing provides trouble free mounting versatility for most access/entry applications

MM-6800™

Sentinel-Prox™ Proximity Reader

Credential Options

- CS – Standard Clamshell Style Prox Badge, Credit Card Size with Beveled Edges, Pre-Punched in Portrait Orientation, Accepts Photo-Flap and Self-Adhesive Badge Overlays. 6-8in Read Ranges.

- GR – Graphics Quality Prox Card, ISO Compliant Thickness for Badging Graphics Quality, Both Sides Printable. Portrait or Landscape Punch Capability. Available with Magnetic Stripe (GRMAG). 6-8in Read Ranges.

- KT – Stylish Prox Key Tag. Designed to Fit on Key ring/chain. Triangular Design for comfortable holding. ABS Construction for High-Endurance. 5-6in Read Ranges.

- PW – One inch Diameter Disc Prox Wafer. Transform any Credential (Laminated ID badge, Magnetic Stripe Card, Bar Coded ID Card, Swipe Card, Barium Ferrite Card, Drivers License, etc) into an AWID compatible Prox Card instantly. Eliminate the Expense and Hassles of Re-Badging your Employees.

SPECIFICATIONS

PERFORMANCE CHARACTERISTICS
Read Range:
6-8 inch (15.2- 20.3 cm)
Transmitting Frequency:
125 kHz
Voltage:
5-12V DC
Current:
50-80 mA
Audio alarm:
4 kHz burst
Communication protocol:
Wiegand, RS-232 with interface length up to 500 ft
Data Format:
Configurable 26 bit to 50 bit (determined by code in credentials)
Cable to Controller (Wiegand interface):
5 conductors stranded #22AWG, color-coded insulation, overall 100% shield

PHYSICAL CHARACTERISTICS
Dimensions:
1.75x6.0x1.0 in (4.4x15.2x2.54 cm)
Weight:
6 oz. (170 g)
Color:
Dark Gray or Beige

ENVIRONMENTAL
Operating Temperature:
-13F° to 140°F (-25 °C to 60 °C)
Operating Humidity:
0-95% non-condensing
Regulatory:
FCC Part 15
Industry Canada
UL Listed

Note:
Unit is splash proof, not water resistant

Applied Wireless Identifications Group, Inc.
18300 Sutter Blvd.
Morgan Hill, CA 95037
Tel: (408) 825-1100
Fax: (408) 782-7402
www.awid.com

DISCLAIMER: Specifications subject to change without notice. AWID reserves the right to make changes to improve performance without impacting form, fit or function. The MM-6800, Sentinel Prox and Prox Linc are trademarks of Applied Wireless Identifications Group, Inc.

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SP-6820™
Sentinel-Prox™
Proximity Reader

AWID's Sentinel-Prox™ Proximity Reader SP-6820 is specially suited for applications where a discriminating look makes a difference. An attractive package which looks great outside the Board room or at the front gate in the rain or snow. With a read range of 6 to 8 inches, the SP-6820 delivers exceptional value without compromise on quality, durability, or performance for both indoor and outdoor applications.

The SP-6820 reader is a fully featured Wiegand and RS-232 compatible reader with an LED and Annunciator for both small and large volume OEM and Dealer installations. It is designed to mount on a standard-single-gang electric wall-box or on the surface of an interior or exterior wall.

The SP-6820's attractive enclosure comes in dark gray or beige color. The SP-6820's electronics are encapsulated in an UL-approved epoxy resin potting compound to seal them against adverse environmental conditions.

When a valid card/tag is presented within the reader's field, the reader's LED momentarily turns AMBER and the beeper sounds to indicate that a data transmission took place. If the card/tag stays within the reader's field, the LED will blink RED/GREEN to indicate that the reader is functioning properly.

The reader has a re-present mode in which the card must be taken from the reader field before being read again. This feature eliminates multiple reads from a single card presentation.
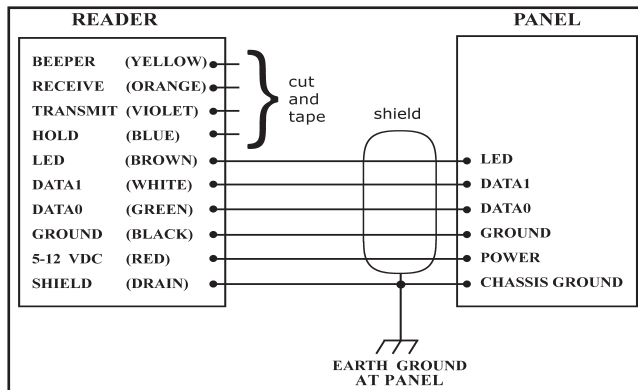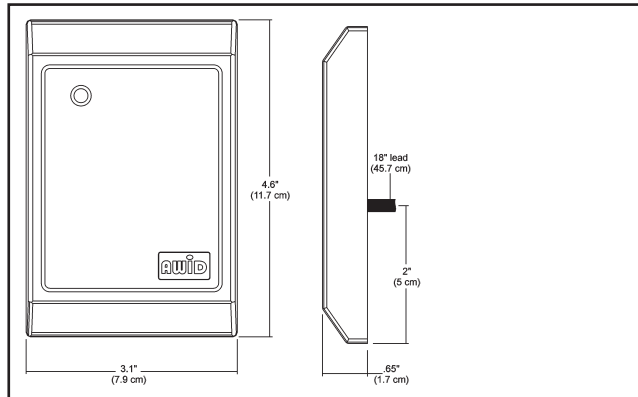
Features

- Read range of 6 to 8 inches

- Specially designed for attractive appearance

- Electronics potted with epoxy compound for demanding environmental applications

- LED for visual feedback, Piezo beeper for audio feedback

- Compatible with all Wiegand access control systems

- Industry standard Wiegand (26 to 50 bit) output and RS-232 interface

- Attractive high-tech enclosure with dark gray or beige color

Benefits

- Ease of use and entry. Assures long life of cards by eliminating need to physically swipe card against reader

- Elegant and easy mounting

- Reader electronics protected against application elements to assure long reader life.

- Visual and Audible indicators providing dependable user feedback and guidance for quick and easy installation

- Wiegand output allows use of multiple control panels allowing stocking of one reader for all applications and credential requirements

- Choice of color matching settings

NOTE: FOR OUTDOOR USE UNIT MUST BE INSTALLED IN MINIMUM IP64 RATED HOUSING

SP-6820™

Sentinel-Prox™ Proximity Reader

READER — **PANEL** wiring diagram:

READER		
BEEPER	(YELLOW)	}
RECEIVE	(ORANGE)	cut and tape
TRANSMIT	(VIOLET)	
HOLD	(BLUE)	
LED	(BROWN)	LED
DATA1	(WHITE)	DATA1
DATA0	(GREEN)	DATA0
GROUND	(BLACK)	GROUND
5-12 VDC	(RED)	POWER
SHIELD	(DRAIN)	CHASSIS GROUND

shield

EARTH GROUND AT PANEL

Credential Options

- CS – Standard Clamshell Style Prox Badge, Credit Card Size with Beveled Edges, Pre-Punched in Portrait Orientation, Accepts Photo-Flap and Self-Adhesive Badge Overlays. 6-8in Read Ranges.

- GR – Graphics Quality Prox Card, ISO Compliant Thickness for Badging Graphics Quality, Both Sides Printable. Portrait or Landscape Punch Capability. Available with Magnetic Stripe (GRMAG). 6-8in Read Ranges.

- KT – Stylish Prox Key Tag. Designed to Fit on Key ring/chain. Triangular Design for comfortable holding. ABS Construction for High-Endurance. 5-6in Read Ranges.

- PW – One inch Diameter Disc Prox Wafer. Transform any Credential (Laminated ID badge, Magnetic Stripe Card, Bar Coded ID Card, Swipe Card, Barium Ferrite Card, Drivers License, etc) into an AWID compatible Prox Card instantly. Eliminate the Expense and Hassles of Re-Badging your Employees.

SPECIFICATIONS

PERFORMANCE CHARACTERISTICS
Read Range:
6-8 inch (15.2- 20.3 cm)
Transmitting Frequency:
125 kHz
Voltage:
5-12V DC
Current:
50-80 mA
Audio alarm:
4 kHz burst
Communication protocol:
Wiegand, RS-232 with interface length up to 500 ft
Data Format:
Configurable 26 bit to 50 bit (determined by code in credentials)
Cable to Controller (Wiegand interface):
5 conductors stranded #22AWG, color-coded insulation, overall 100% shield

PHYSICAL CHARACTERISTICS
Dimensions:
3.1x4.6x0.65 in (7.9x11.7x1.7 cm)
Weight:
8 oz. (227 g)
Color:
Dark Gray or Beige

ENVIRONMENTAL
Operating Temperature:
-31F° to 150°F (-35 °C to 65 °C)
Operating Humidity:
0-95% non-condensing
Regulatory:
FCC Part 15
Industry Canada
UL Listed

Note:
Unit is splash proof, not water resistant

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www.awid.com

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AWID

The RFID with Best ROI™

KP-6840™
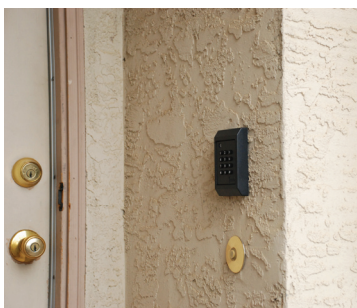## Sentinel-Prox™
Proximity Reader

AWID's Sentinel-Prox Proximity Reader KP-6840 is a combination PIN pad and Switchplate-style reader, specially designed for high-security applications that require dual verification. With a read range of 6 to 8 inches, the KP-6840 delivers exceptional value without compromise on quality, durability, and performance for both indoor and outdoor applications.

The KP-6840 reader is a fully featured Wiegand and RS-232 compatible reader with an LED and Annunciator for both small and large volume OEM and Dealer installations. It is designed to mount on a standard-single-gang electric wall-box or on the surface of an interior or exterior wall.

The KP-6840's attractive enclosure comes in a dark gray color. Its electronics are potted in UL-approved epoxy resin potting compound to seal them against adverse environmental conditions. It is manufactured in an ISO 9001:2000 certified facility providing for the highest quality standard.

When a valid card/tag is presented within the reader's field, the reader's LED momentarily turns AMBER and the beeper sounds to indicate that a data transmission took place. If the card/tag stays within the reader's field, the LED will blink RED/GREEN to indicate that the reader is functioning properly.

The reader has a re-present mode in which the card must be taken from the reader field before being read again. This feature eliminates multiple reads from a single card presentation.

Features

- Read range of 6 to 8 inches
- PIN pad for dual verification
- Specially designed for an attractive appearance
- Electronics potted with epoxy compound for demanding environmental applications
- LED for visual feedback, Piezo beeper for audio feedback
- Compatible with all Wiegand access control systems
- Industry standard Wiegand output and RS-232 interface
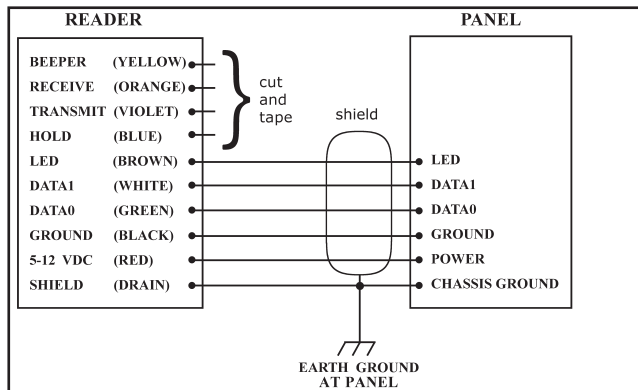- Attractive high-tech enclosure in dark gray

Benefits

- Ease of use and entry. Assures long life of cards by eliminating need to physically swipe card against reader
- Perfect for high security applications
- Elegant and easily mounted
- Reader electronics protected against application elements to assure long reader life
- Visual and Audible indicators providing dependable user feedback and guidance for quick and easy installation
- Wiegand output allows use of multiple control panels allowing stocking of one reader for all applications and credential requirements

KP-6840™

Sentinel-Prox™ Proximity Reader

Credential Options

- CS – Standard Clamshell Style Prox Badge, Credit Card Size with Beveled Edges, Pre-Punched in Portrait Orientation, Accepts Photo-Flap and Self-Adhesive Badge Overlays. 6-8in Read Ranges.

- GR – Graphics Quality Prox Card, ISO Compliant Thickness for Badging Graphics Quality, Both Sides Printable. Portrait or Landscape Punch Capability. Available with Magnetic Stripe (GRMAG). 6-8in Read Ranges.

- KT – Stylish Prox Key Tag. Designed to Fit on Key ring/chain. Triangular Design for comfortable holding. ABS Construction for High-Endurance. 5-6in Read Ranges.

- PW – One inch Diameter Disc Prox Wafer. Transform any Credential (Laminated ID badge, Magnetic Stripe Card, Bar Coded ID Card, Swipe Card, Barium Ferrite Card, Drivers License, etc) into an AWID compatible Prox Card instantly. Eliminate the Expense and Hassles of Re-Badging your Employees.

SPECIFICATIONS

PERFORMANCE CHARACTERISTICS

Read Range:
6-8 inch (15.2- 20.3 cm)
Transmitting Frequency:
125 kHz
Voltage:
5-12V DC
Current:
60-120 mA
Audio alarm:
4 kHz burst
Communication protocol:
Wiegand and RS-232 for card/tag reader; Wiegand only for PIN pad
Data Format:
Configurable 26 bit to 50 bit (determined by code in credentials)
Cable to Controller (Wiegand interface):
5 conductors stranded #22AWG, color-coded insulation, overall 100% shield

PHYSICAL CHARACTERISTICS

Dimensions:
3.1x4.6x0.875 in (7.9x11.7x2.2 cm)
Weight:
8 oz. (227 g)
Color:
Dark Gray

ENVIRONMENTAL

Operating Temperature:
-31F° to 150°F (-35 °C to 65 °C)
Operating Humidity:
0-95% non-condensing
Regulatory:
FCC Part 15
Industry Canada
UL Listed

Note:
Unit is splash proof, not water resistant

Applied Wireless Identifications Group, Inc.
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AWiD

MR-1824™ and MR-1824MC™
Sentinel-Prox™
Medium Range Reader

AWID's Sentinel-Prox Medium-Range Reader MR-1824 is a mid-range proximity reader at an economical price. With an industry best read range of 10 to 24 inches, it eliminates the need to get the card close to the reader, and no more misreads or fumbling. It delivers exceptional value without compromise on quality, durability, and performance for both indoor and outdoor applications.

The MR-1824MC is a Metal Compensated version of MR-1824 to allow flexible mounting applications to metal surfaces by adhering four ferrite plates (4x4x0.25 in and 8 oz. each) to the back of MR-1824.

The MR-1824 reader is a fully featured Wiegand and RS-232 compatible reader with an LED and Annunciator for both small and large volume OEM and Dealer installations. It is designed to mount on the surface of an interior or exterior wall.

The MR-1824's attractive enclosure comes in dark gray. Its electronics are potted in UL-approved epoxy resin potting compound to seal them against adverse environmental conditions. It is manufactured in an ISO 9001:2000 certified facility providing for the highest quality standard.

When a valid card/tag is presented within the reader's field, the reader's LED momentarily turns AMBER and the beeper sounds to indicate that a data transmission took place. If the card/tag stays within the reader's field, the LED will blink RED/GREEN to indicate that the reader is functioning properly.
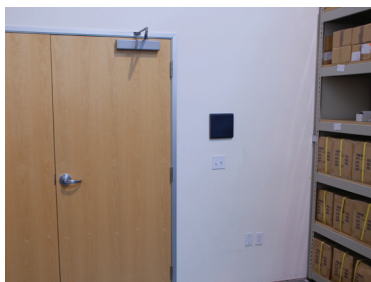
The reader has a re-present mode in which the card must be taken from the reader field before being read again. This feature eliminates multiple reads from a single card presentation.

Features

- Read range of 10 to 24 inches

- Metal compensation available for mounting on metal surfaces

- Electronics potted with epoxy compound for demanding environmental applications

- LED for visual feedback, Piezo beeper for audio feedback

- Compatible with all Wiegand access control systems

- Industry standard Wiegand (26 to 50 bit) output and RS-232 interface

- Attractive high-tech enclosure with dark gray
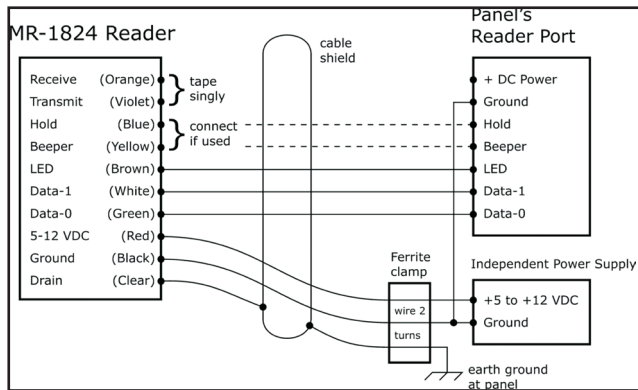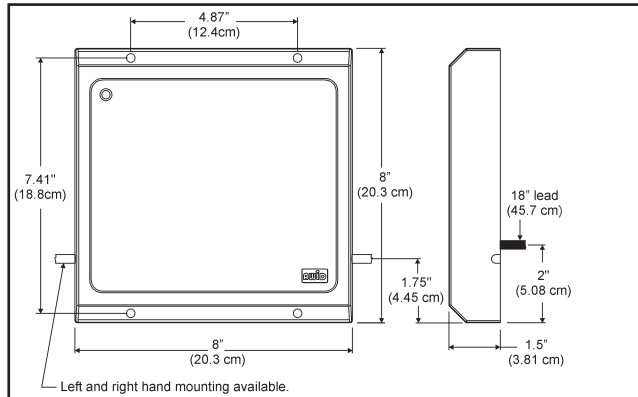
Benefits

- Medium read range for building/ large door access control applications requiring longer read ranges

- MR-1824MC is ideal for applications requiring mounting on metal surfaces

- Reader electronics protected against application elements to assure long reader life

- Visual and Audible indicators providing dependable user feedback and guidance for quick and easy installation

- Wiegand output allows use of multiple control panels allowing stocking of one reader for all applications and credential requirements

NOTE: FOR OUTDOOR USE UNIT MUST BE INSTALLED IN MINIMUM IP64 RATED HOUSING

MR-1824™ and MR-1824MC™

Sentinel-Prox™ Medium Range Reader

4.87" (12.4cm)

7.41" (18.8cm)

8" (20.3 cm)

1.75" (4.45 cm)

8" (20.3 cm)

18" lead (45.7 cm)

2" (5.08 cm)

1.5" (3.81 cm)

Left and right hand mounting available.

MR-1824 Reader

Receive	(Orange)	} tape singly
Transmit	(Violet)	
Hold	(Blue)	} connect if used
Beeper	(Yellow)	
LED	(Brown)	
Data-1	(White)	
Data-0	(Green)	
5-12 VDC	(Red)	
Ground	(Black)	
Drain	(Clear)	

cable shield

Panel's Reader Port

+ DC Power
Ground
Hold
Beeper
LED
Data-1
Data-0

Ferrite clamp

wire 2 turns

Independent Power Supply

+5 to +12 VDC
Ground

earth ground at panel

Credential Options

- HT-CUSTOM - ProxLinc ™ Hang Tag for rear view mirror, available in 7" lengths.

- CS – Standard Clamshell Style Prox Badge, Credit Card Size with Beveled Edges, Pre-Punched in Portrait Orientation, Accepts Photo-Flap and Self-Adhesive Badge Overlays.

- GR – Graphics Quality Prox Card, ISO Compliant Thickness for Badging Graphics Quality, Both Sides Printable. Portrait or Landscape Punch Capability. Available with Magnetic Stripe (GRMAG).

- KT – Stylish Prox Key Tag. Designed to Fit on Key ring/chain. Triangular Design for comfortable holding. ABS Construction for High-Endurance. 15-20in Read Ranges.

- PW – One inch Diameter Disc Prox Wafer. Transform any Credential (Laminated ID badge, Magnetic Stripe Card, Bar Coded ID Card, Swipe Card, Barium Ferrite Card, Drivers License, etc) into an AWID compatible Prox Card instantly. Eliminate the Expense and Hassles of Re-Badging your Employees.

Specifications

PERFORMANCE CHARACTERISTICS
Read Range:
10-24 inch (46- 61 cm)
Transmitting Frequency:
125 kHz
Voltage:
5-12V DC
Current:
250-600 mA
Audio alarm:
4 kHz burst
Communication protocol:
Wiegand, RS-232 with interface length up to 500 ft
Data Format:
Configurable 26 bit to 50 bit (determined by code in credentials)
Cable to Controller (Wiegand interface):
5 conductors stranded #22AWG, color-coded insulation, overall 100% shield

PHYSICAL CHARACTERISTICS
Dimensions:
8x8x1.5 inch (20.3x20.3x3.81 cm) for MR-1824;
8x8x1.75 inch (20.3x20.3x4.44 cm) for MR-1824MC
Weight:
25 oz. (709 g) for MR-1824; 57 oz. (1,617 g) for MR-1824MC
Color:
Dark Gray

ENVIRONMENTAL
Operating Temperature:
-31F° to 150°F (-35 °C to 65 °C)
Operating Humidity:
0-95% non-condensing
Regulatory:
FCC Part 15
Industry Canada
UL Listed
Note:
Unit is splash proof, not water resistant

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DISCLAIMER: Specifications subject to change without notice. AWID reserves the right to make changes to improve performance without impacting form, fit or function. The MR-1824, MR-1824MC, Sentinel Prox and Prox Linc are Trademarks of Applied Wireless Identifications Group, Inc.

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AWID

The RFID with Best ROI™

NDK-2025LF™
Sentinel-Prox™
Proximity Reader

AWID's Sentinel-Prox Proximity Reader NDK-2025LF is a non-destructable reader with integrated 12-key keypad for PIN number input in a durable metal housing. NDK-2025 is designed for high-security applications that require dual verification in vandal, tamper and weather proof environments. With a read range of 2 to 2.5 inches, the NDK-2025 delivers exceptional value without compromise on quality, durability, and performance for both indoor and outdoor applications.

The NDK-2025 reader is a fully featured Wiegand and RS-232 compatible reader with an LED and Annunciator for both small and large volume OEM and Dealer installations. It is designed to mount on a standard-single-gang electric wall-box or on the surface of an interior or exterior wall.

The NDK-2025's attractive enclosure comes in silver color. Its electronics are potted in UL-approved epoxy resin potting compound to seal them against adverse environmental conditions. It is manufactured in an ISO 9001:2000 certified facility providing for the highest quality standard.

When a valid card/tag is presented within the reader's field, the reader's LED momentarily turns AMBER and the beeper sounds to indicate that a data transmission took place. If the card/tag stays within the reader's field, the LED will blink RED/GREEN to indicate that the reader is functioning properly. The reader has a re-present mode in which the card must be taken from the reader field before being read again. This feature eliminates multiple card reads from a single card presentation.

- Durable metal housing with pressure sensing and anodized keypad

- Read range of 2 to 2.5 inches

- PIN pad for dual verification

- LED for visual feedback, Piezo beeper for audio feedback

- Industry standard Wiegand output and RS-232 interface

- Specially designed for vandal. tamper and weather proof environments

- Visual and Audible indicators providing dependable user feedback and guidance for quick and easy installation

- Ease of use and entry. Assures long life of cards by eliminating need to physically swipe card against reader

SPECIFICATIONS

PERFORMANCE CHARACTERISTICS
Read Range:
2-2.5 inch (5- 6.3 cm)
Transmitting Frequency:
125 kHz
Voltage:
5-12V DC
Current:
60-90 mA
Audio alarm:
4 kHz burst
Communication protocol:
Wiegand and RS-232 for card/tag reader; Wiegand only for PIN pad
Data Format:
Configurable 26 bit to 50 bit (determined by code in credentials)
Cable to Controller (Wiegand interface):
5 conductors stranded #22AWG, color-coded insulation, overall 100% shield

PHYSICAL CHARACTERISTICS
Dimensions:
5.12x3.55x1.03 in (13x9x2.6 cm)
Weight:
12 oz (340 g)
Color:
Silver

ENVIRONMENTAL
Operating Temperature:
-31F° to 150°F (-35 °C to 65 °C)
Operating Humidity:
0-95% non-condensing
Regulatory:
FCC Part 15
Industry Canada

Credentials for LF Proximity Readers

Prox-Linc™ CS-AWID-0-0

- Standard Clamshell Style Prox Badge
- Credit Card Size with Beveled Edges
- Customizable with your logo on the front!
- Accepts Photo Flap and Self Adhesive Badge Overlays.
- Pre-Punched in Portrait Orientation
- Off White Color

Read Ranges
From 4in - 24in. Depending on Reader
Prox-Linc™ CS Dimensions
3.375 x 2.125 x .075in (8.57 x 5.4 x .19cm)

Prox-Linc™ GR-AWID-0-0

- Graphics Quality Prox Card
- ISO Compliant Thickness for Badging
- Customizable Graphics Quality, Both Sides!
- Portrait or Landscape Punch Capability
- No Diminished Read Range
- White, Fine Matte Finish
- Available with magnetic Stripe (GRMAG-AWID-0-0)

Read Ranges
From 4in. - 24in. Depending on Reader
Prox-Linc™ GR Dimensions
3.375 x 2.125 x .033in (8.57 x 5.4 x .08cm)

Prox-Linc™ KT-AWID-G-0

- Key Tag Designed to fit on Key ring / Chain
- Stylish, Triangular Design
- Achieves 75% Read Range of Cards
- ABS Construction for High Endurance
- Water-Resistant
- Dark Gray Color

Read Ranges
From 3in. - 19in. Depending on Reader
Prox-Linc™ KT Dimensions
1.57x 1.38 x .22in. (4 x 3.5 x .55cm)

Technology:

Security:

The Prox-Linc™ cards / tags can be programmed with up to 72,058 trillion unique codes

Long Life:

No direct contact, no battery, capable of an infinite number of reads to assure years of maintenance free operation

Custom Formats:

Custom programmable Wiegand format up to 50 user definable bits insures security, compatibility and minimal lead times.

Frequency:

125 kHz - Passive

Operating Temperature:

- 31° to 150° F (-35 to 65° C)

Operating Humidity:

0-95% non-condensing

Required Information for Ordering:

- Bit Format
- Facility/Site Code
- Sequence Numbers

Credentials for LF Proximity Readers

Read Ranges

From 3in. - 20in. Depending on Reader

Prox Linc™ HT Dimensions

7.19in x 2.12in

Prox-Linc™ HT-CUSTOM-0-0

- Contains proximity technology in a rugged laminated tag
- 7.25 inches in length
- Custom printed colors, logos and designs
- 26 to 50bit Wiegand - trillions of unique codes
- Visual compliance & proximity technology in one credential

Read Ranges

From 2.5in. - 10.0in. Depending on Reader

Prox-Linc™ PW Dimensions

1in. X .034in. (2.54 x .086cm.)

Prox-Linc™ PW-AWID-0-0

- Proximity Wafer, One Inch Diameter Disc
- Semi Permanent Adhesive Backing
- Transforms any Credential (Laminated ID Badge, Magnetic Stripe Card, Bar Coded ID Card, Wiegand Swipe Card, Barium Ferrite Card, Drivers License or Car Key Fob/Remote/Key Ring) into an AWID compatible Prox Card instantly!
- Eliminates the Expense and Hassles of Re-Badging your Employees.
- Can be inserted onto Key Fobs and Remotes

Technology:

Security:

The Prox-Linc™ cards / tags can be programmed with up to 72,058 trillion unique codes

Long Life:

No direct contact, no battery, capable of an infinite number of reads to assure years of maintenance free operation

Custom Formats:

Custom programmable Wiegand format up to 50 user definable bits insures security, compatibility and minimal lead times.

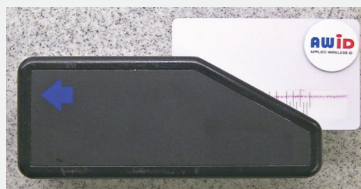**Frequency:**

125 kHz - Passive

Operating Temperature:

- 31° to 150° F (-35 to 65° C)

Operating Humidity:

0-95% non-condensing

Required Information for Ordering:

- Bit Format
- Facility/Site Code
- Sequence Numbers

![AWID logo]

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UA-612™
UHF ACCESS PROXIMITY READER

AWID's UHF Proximity Reader, UA-612, with an integrated antenna is specially suited for applications where a discriminating look makes a difference. An attractive package which looks great outside the Board room or at the front gate in the rain or snow. With a read range of 6 to12 inches, the UA-612 delivers exceptional value without compromise on quality, durability, or performance for both indoor and outdoor applications.

The UA-612 reader is a fully featured Wiegand and RS-232 compatible reader with an LED and Annunciator for both small and large volume OEM and Dealer installations. It is designed to mount on a standard-single-gang electric wall-box or on the surface of an interior or exterior wall.

The UA-612's attractive enclosure comes in a rich midnight black color. The UA-612's electronics are sealed to protect them against adverse environmental conditions.

When a valid card/tag is presented within the reader's field, the reader's LED momentarily turns AMBER and the beeper sounds to indicate that a data transmission took place. If the card/tag stays within the reader's field, the LED will blink RED/GREEN to indicate that the reader is functioning properly.
The reader has a re-present mode in which the card must be taken from the reader field before being read again. This feature eliminates multiple reads from a single card presentation.

- **The same UHF credential can be used for both the AWID LR-2000 parking access reader and the UA-612 door access reader**

- Read range of 6 to 12 inches

- Specially designed for attractive appearance

- Electronics sealed for demanding environmental applications

- LED for visual feedback, Piezo beeper for audio feedback

- Compatible with all Wiegand access control systems

- Industry standard Wiegand (26 to 50 bit) output and RS-232 interface

- Attractive high-tech enclosure

NOTE: FOR OUTDOOR USE UNIT MUST BE INSTALLED IN MINIMUM IP64 RATED HOUSING

SPECIFICATIONS

PERFORMANCE CHARACTERISTICS
Read Range:
6-12 inches
Transmitting Frequency:
902 - 928MHz
Voltage:
7.5 -15 VDC
Current Requirement:
7.5 VDC @ 570 mA
15 VDC @ 290 mA
Audio Alarm:
4 kHz burst
Communication Interface:
 Wiegand and RS-232
Data Format:
26 bits to 50 bits (as programmed in the cards or tags)
Cable to Controller (Wiegand interface)
5 conductors stranded 22 AWG or larger, color-coded insulation, overall 100% shield

PHYSICAL CHARACTERISTICS
Dimension:
4.93x3.43x.98 inches (125x85x25 mm)
Weight:
8 oz.. (227 g)
Color:
Midnight Black

ENVIRONMENTAL
Operating Temperature:
-31F° to 150°F (-35 °C to 65 °C)
Operating Humidity:
0-95% non-condensing
Regulatory: To be Available
FCC Part 15
Industry Canada

AUTHORIZED DISTRIBUTORS / SALES REPRESENTATIVES
& AWID REGIONAL SALES OFFICES

DISTRIBUTOR	PHONE	STATE
A1 SECURITY	(800) 345-9231	FL, CARIBBEAN
ACCESS AUTOMATION & CONTROLS	(800) 972-8866	NATIONWIDE
ALARM PRODUCTS DISTRIBUTORS	(800) 783-1552	MN, ND, SD
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MILSK COMPANY	(248) 354-3310	MI
SYSTEM SOLUTIONS	(651) 436-7841	MN, ND, SD, WI
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