



The RFID with Best ROI™

LR-2000™ Extra Long-Range Reader

AWID's LR-2000™ Long-Range Reader is a UHF tag and card reader used in RFID applications like gate access for vehicles, and physical access for people. Its electronics and antenna are integrated in a single compact enclosure. The LR-2000 is optimally designed for Automatic Vehicle Identification (AVI) and Access Control applications such as parking facility gate control in a parking facility. It also provides identification and access for people at doorways, wheelchairs at elevators, and gurneys in hospital entrances. The LR-2000 Reader assures security by use of AWID's proprietary encryption for communications between the reader and its UHF vehicle tags and hand-held cards.



The LR-2000 reader is suitable for outdoor applications. (A protective polycarbonate housing may be required – see Note below.) The LR-2000 offers price: performance advantage over conventional long-range proximity card and active-tag UHF systems. The LR-2000 can be combined

with AWID's UA-612 door access reader, allowing the same hand-held cards to be used for both vehicle parking access and door access in buildings.

The LR-2000 operates in the license-free 902-928 MHz UHF band. It combines effective UHF technology with economical passive tags and cards, programmable read repetition rate and RF field strength, and simultaneous Wiegand and RS-232 data outputs. It can be interfaced with all standard access and AVI systems. The reader is manufactured in an ISO-9001 certified facility assuring the highest quality standard. The LR-2000 offers an impressive combination of single unit construction, small size, and attractive appearance. Tag reading distance is commonly up to 15 feet and sometimes more, depending on reader mounting, credential type, and environment.



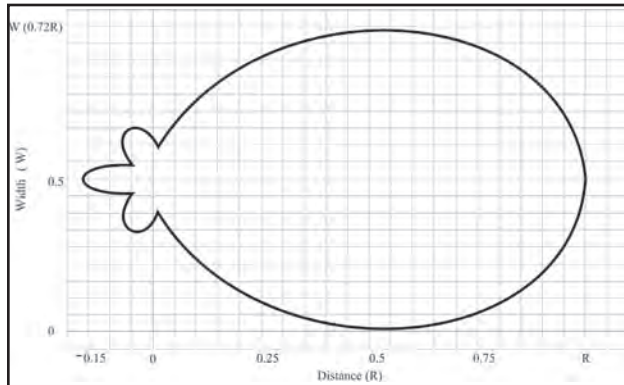
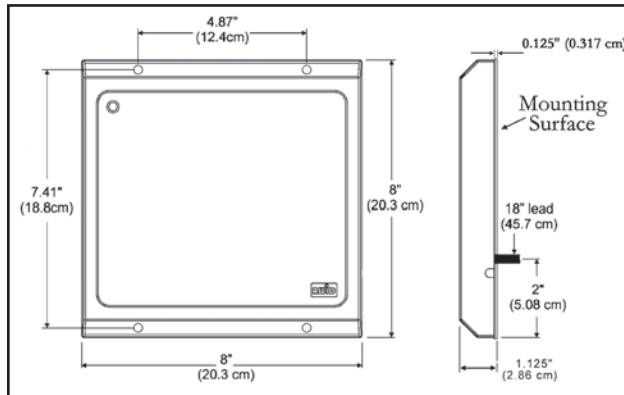
FEATURES

- Longer reading distance . . .
Up to 15 feet between reader and tag
- Small, attractive reader . . .
Single unit with antenna, 8" x 8" x 1-1/8"
- Easy reader installation . . .
No reader programming; simple wiring
- Big selection of credentials . . .
5 vehicle tags, and 2 hand-held cards
- Unlimited tag or card life . . .
Passive battery-free credentials
- Data output to fit the system . . .
Selectable read repeat rate
- No interference between readers, and no cross-reading between lanes . . .
Programmable RF field strength
- Dual antenna units for difficult sites . . .
Optional LR-2000HiLoMA reader set
- RF transmission only as needed . . .
Use vehicle sensor to arm the RF circuit
- LR-2000 mixes with other readers . . .
Uses same code format as prox readers
- Easy interfacing to control systems . . .
Both Wiegand and RS-232 data output
- Complies with certifications . . .
ISO-9001:2000; FCC Part 15; IC
- Ideal upgrade for old systems . . .
Hands-free car ID; cards for people ID
- Eliminates stop-and-wait entry . . .
Cars continue moving past reader
- For outdoor applications . . .
*Housing available for rain and sun**
- Easy to buy and own . . .
Installer needs no FCC registration

* NOTE: WHEN INSTALLED OUTDOORS AND EXPOSED TO RAIN OR SNOW, OR TO DIRECT SUN IN A HOT ENVIRONMENT, LR-2000 MUST BE MOUNTED INSIDE A HOUSING WITH MINIMUM IP64 RATING.

LR-2000™

UHF Extra Long-Range Reader



ACCESSORIES AND SUPPLIES

- [LR-2000KIT Installation Kit](#) – A **requirement** for all installers. An effective way to demonstrate the LR-2000, to prove its operation, to measure its performance, to locate tags, and to aim the reader. A one-time purchase.
- [Mounting bracket](#) – Pan-and-tilt adjustable, for aiming the LR-2000 at the tags' reading location. AWID offers LR-MB-0-0.
- [Power supply](#) – Each LR-2000 requires a separate, independent, dedicated power supply. Ask AWID for specifications. AWID offers PS-12-3.3A-0-0.
- [Cable for power and data](#) – Correct cable assures good reader performance. Ask AWID for specifications.
- [Protective housing](#) – To avoid rain, snow, hot sunlight and vandalism, AWID suggests Model PCH196 Lexan housing from The Housing Company.
- [Mounting devices](#) – Consult with supplier for poles, posts, pedestals, bollards, barriers, etc.
- [System components](#) – Consult with supplier for access control package, gates, vehicle sensors.
- [Installation & Operation Manual](#) – Download Manual from AWID's Web site.
- [HH-6600 UHF Handheld Reader](#) – Check codes in tags and cards up to 6 feet.

CREDENTIAL OPTIONS

- [Vehicle-mounted tags](#) – Tags for permanent or movable applications, inside or outside vehicles.
- [Hand-held cards](#) – Clamshell-type and graphics-type cards (for UA-612 also).

Ask AWID about tag selection and mounting methods.

OPERATING CHARACTERISTICS

- Reading Distance:**
Up to 15 feet (4.6 meters)
- Frequency Band:**
902 to 928 MHz (in USA)
Frequency-hopping technology
- Antenna Output:**
Circular-polarized RF field
- Power Supply:**
7 to 15 volts DC – linear, regulated (12 VDC) Rated for 1.5 A or more
Separate, independent, dedicated
- Communications Protocol:**
Wiegand and RS-232, simultaneous
- Code Formats:**
Determined by AWID's tags & cards programmed with 26 bits to 50 bits

- Cables:**
Power – 2 conductors, 18 gauge
Data – 3 conductors, 22 gauge
Stranded, color-coded, shielded
Up to 500 feet long
- Field-Programmable Features:**
Read repetition rate; RF power level

PHYSICAL CHARACTERISTICS

- Dimensions:**
8 x 8 x 1.125 inches (20.3 x 20.3 x 2.86 cm)
- Weight:** 37.5 ounces (1.06 kg)
- Material (Color):**
ABS enclosure (beige); aluminum backplate

- Cable (Integrated with Reader):**
10 conductors, 32 inches long
Overall shielded, plastic sheathed

- Mounting (Supplied by Installer):**
Pan-and-tilt adjustment for aiming

ENVIRONMENT

- Operating Temperature:**
At 50% duty cycle –
-31 to +150 F (-35 to +65 C)
At 100% duty cycle –
-31 to +115 F (-35 to +45 C)

- Operating Humidity:**
0% to 95%, non-condensing

- Protection from Environment:**
Use Lexan housing when reader is exposed to rain or snow, or to bright sunlight in hot area.

- Avoiding Interference:**
Optimize reader performance by avoiding sources of RF – fluorescent and other arc lighting, UHF transmitters, other readers.

CERTIFICATION

ISO-9001:2000; FCC Part 15; IC



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