



## Maximum RFID

# CREDENTIALS for UHF READERS LR-2000, LR-2200, LR-3000 & UA-612

## VEHICLE-MOUNTED TAGS

### WS-UHF-0-0 Windshield Tag

- Self-adhesive tag applied inside windshield
- Hands-free vehicle identification
- Secure tag permanently attached directly on glass
- Out of driver's vision - **slim, neat design**



### RV-UHF-0-0 Rearview Mirror Tag

- Self-adhesive tag applied to rearview mirror frame
- Hands-free vehicle identification
- Secure tag permanently attached on inside mirror
- Almost **invisible** - tag's black side faces windshield



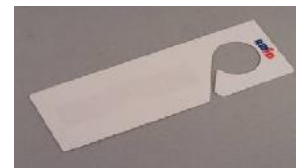
### VT-UHF-0-0 Sunvisor Tag

- Clip-on tag for sunvisor - reads through windshield
- Quick access - driver lowers sunvisor to read tag
- Held by plastic clip - **out of sight between reads**
- Easily moved from one vehicle to another by user



### HT-UHF-0-0 Hangtag for Inside Mirror

- Hook-on tag - hangs on post of inside mirror
- Hands-free vehicle identification
- **Visible through windshield** for printed identification
- Can be moved to other vehicles or hidden from view



### MT-UHF-0-0 Metal-Mount Bar Tag

- **Variety of uses** - inside or outside, fixed or movable
- Use tag's adhesive or fasteners or hook & loop tape
- Ideal for big trucks & buses - tag facing side of lane
- For other uses - forklifts, golf carts, wheelchairs...



## HAND-HELD CARDS

### CS-UHF-0-0 Clamshell Card

- **Rugged hand-held slotted card** for these UHF readers
- Squeeze between thumb & finger - aim outside window
- For vehicle gate access and people at doors in building
- May have adhesive overlays for photo ID badging



### GR-UHF-0-0 Graphics-Quality Card

- **Slim hand-held card** for direct photo ID badge printing
- Squeeze between thumb & finger - aim outside window
- For vehicle gate access and people at doors in building
- Uses: vehicle ID, door access, photo ID badge, bar code





## Maximum RFID

### Reading Distances – Rated Up To These Distances In Practical Applications

Tag or Card	LR-2000, LR-2200	LR-3000	UA-612
<b>WS-UHF-0-0</b>	25 feet (7.6 meters)	25 feet (7.6 meters)	(Not applicable)
<b>RV-UHF-0-0</b>	20 feet (6.1 meters)	20 feet (6.1 meters)	(Not applicable)
<b>VT-UHF-0-0</b>	15 feet (4.6 meters)	15 feet (4.6 meters)	(Not applicable)
<b>HT-UHF-0-0</b>	10 feet (3.0 meters)	10 feet (3.0 meters)	(Not applicable)
<b>MT-UHF-0-0</b>	25 feet (7.6 meters)	25 feet (7.6 meters)	(Not applicable)
<b>CS-UHF-0-0</b>	25 feet (7.6 meters)	25 feet (7.6 meters)	6 inches (15 cm)
<b>GR-UHF-0-0</b>	20 feet (6.1 meters)	20 feet (6.1 meters)	6 inches (15 cm)

#### Reader Selection

- Vehicle-mounted tags: Use with these UHF long-range ("LR") readers only.
- Hand-held cards: Use with these UHF long-range readers and also UA-612 readers.

#### Technology in Tags and Cards

- UHF communications: Bi-directional between UHF readers and credentials.
- Excitation frequency: 865-868 MHz for LR-2200 readers; 902-928 MHz for other readers.
- Read repetition rate: Set in the readers. For "LR" readers, rep rate is 3 reads per second (field-programmable to slower rates).

#### Encoding for Tags and Cards

- Code format types: Wiegand type for general use; other types on special order.
- Code format options: Open codes - 26 bits and 37 bits. Proprietary codes – up to 50 bits. Special formats – call AWID.

#### Information Required in Purchase Order (*Include leading zeros in facility code and ID numbers*)

1. Credential part number and quantity.
2. Code format name (*nn-bit-FFF*, where *nn* = total number of bits, and *FFF* = 3 letters for format assignment). Example: 26-bit-STD.
3. Facility code (also called site code or company code).
4. Starting and ending numbers for the individual identification numbers (in sequence).

#### Environmental Conditions

- Operating temperature: -31° F to +150° F (-35° C to +65° C).
- Operating humidity: 0% to 95% non-condensing.
- Exposure to sunlight: Remove UHF cards from direct sunlight inside closed vehicles in hot weather.

#### Size of Tags and Cards

Tag or Card	Width	Height	Thickness	Notes
<b>WS-UHF-0-0</b>	4 inches	1 inch	<1/32 inch	Peel-off sheet covers adhesive.
<b>RV-UHF-0-0</b>	4-3/16 inches	1-1/8 inches	<1/32 inch	Peel-off sheet covers adhesive.
<b>VT-UHF-0-0</b>	4-1/2 inches	2-3/8 inches	1/32 inch	Plus U-clip for sunvisor.
<b>HT-UHF-0-0</b>	2-1/4 inches	6-1/2 inches	1/32 inch	With hook to hang on mirror.
<b>MT-UHF-0-0</b>	8 inches	15/16 inch	1/4 inch	Peel-off label covers adhesive.
<b>CS-UHF-0-0</b>	3-3/8 inches	2-1/8 inches	0.065 inch	1 side has beveled edges.
<b>GR-UHF-0-0</b>	3-3/8 inches	2-1/8 inches	0.033 inch	ISO specifications.

#### Slots and Holes

- **WS-UHF, RV-UHF, HT-UHF:** Must have no slots or holes, punched or drilled.
- **VT-UHF:** Contains a slot for the sunvisor clip (supplied with the tag).
- **MT-UHF:** Contains holes at the ends for screws, rivets, wire ties. Must not be punched or drilled.
- **CS-UHF:** Contains a molded slot for "portrait" hanging from a clip-strap, lanyard or flexible chain.
- **GR-UHF:** May be slot-punched or drilled only at the locations shown on the instructions (included in the shipment).

#### Applications

- Credentials may be used on cars, trucks and buses of all sizes, and on special vehicles (fire trucks, forklifts, motorcycles, golf carts, wheel chairs, gurneys).
- For security, **WS-UHF** and **RV-UHF** tags rip apart when they are removed from their original positions.
- For user convenience, all other tags and cards may be moved easily from one vehicle to another vehicle.
- Credential type and mounting location must be consistent for all readers in a particular installation.
- If used with a "HiLo" reader (dual antennas), credentials may be different types, in different locations, on different vehicle types.
- **CS-UHF** and **GR-UHF** cards read on "LR" readers through driver's window, and also on UA-612 reader for people access in buildings.

#### Installation Guidelines for UHF Credentials

- Before installing these credentials, read AWID's "Installation Instructions" sheet. It contains guidelines and specific steps for using these credentials.

#### Options and Accessories

- LR-KIT Installation Kit: *Required* – a one-time purchase for the installing dealer.
- Custom graphics: Contact your AWID Representative.

#### Instructions

- Download product sheets, instructions, Technical Reference issues, and Technical Support memos.



18300 Sutter Blvd, Morgan Hill, CA 95037  
 Tel: (408) 825-1100 Fax: (408) 782-7402  
<http://www.awid.com>