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 badgeing

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

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

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 (no-bit-FFF, where no = 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

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

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