

## Technical Reference

### Credentials for Long-Range Readers

#### Application: Motorcycles and Small Vehicles

*The UHF credentials that are used with AWID's readers for passenger cars and trucks work as well for motorcycles, golf carts, utility carts, bicycles, and other small vehicles with exposed tags.*

#### Useful Ideas

- Refer to AWID's *product sheets* for UHF credentials, with pictures, specifications, dimensions, etc.
- At the reading zone, credentials must be *aligned* with the reader, and they must *face* the reader straight on.
- Minimize *exposure* of the tags to weather and to physical contact. This will extend their life.
- Except for the MT tag, the credentials must be attached or held *away from metal*.
- The common application is to identify vehicles. The *hand-held* cards and tags nicely identify their *users*.

#### Start – Select the Application Type

Decide which “type” describes the users’ goal for the credentials:

**Type 1:** The tag will be held in place just long enough to test its performance. Then it will be removed.

**Type 2:** The tag will be fastened permanently by screws and nuts, or by pop-rivets. This assures that the tag will always be present and secure.

**Type 3:** The tag will be attached by its adhesive. This allows the tag always to be present *until* it is removed purposely by pulling the tag off its adhesive. (By design, this damages or destroys the thin, flexible tags.)

**Type 4:** The tag or card will be always in possession of the user. This means that the credential is at the vehicle only when the user is. Type 4 credentials can be used with AWID's uAAccess readers as well as with the long-range readers.

#### Next – Select the Best Tag or Card

**Type 1** -- when testing all tags and cards

- Use vinyl tape or masking tape at the ends to hold the tag in place. Do not cover the main body of the tag.
- The MT tag can also be supported for testing by wire or cable ties through the holes at the ends.
- Keep the cover sheet in place over the tag's adhesive while testing.

#### **Type 2**

MT-UHF Metal-Mount Tag (Read rating = 15 feet)

- The rigid black tag must be attached on a flat metal surface as large as the tag (8 inches by 1 inch), facing the reader.
- The tag fastens using 2 security screws, or screws with inaccessible nuts, or pop-rivets at the ends of the tag.

ST-UHF Supertag

- This tag has no practical application on small vehicles. It is for rugged industrial use.

(continued)

**Type 3**

MT-UHF Metal-Mount Tag (Read rating = 15 feet)

- The rigid black tag must be attached on a flat metal surface as large as the tag (8 inches by 1 inch), facing the reader.
- The tag attaches by its own permanent adhesive. The tag can be pried (carefully) from the surface, and re-used.

WS-UHF Windshield Tag (Read rating = 25 feet)

- This is for a clear windshield. The tag can be “outside” facing the reader -- best reading distance, but most exposed. The tag can be “inside” facing the user -- more protected, but with less reading distance.
- The tag attaches to the windshield by its own permanent adhesive. It self-destructs if it is pulled off the windshield.

RV-UHF Rearview Mirror Tag (Read rating = 20 feet)

- The tag may be “outside” or “inside” a clear windshield, or on a non-metal surface (the black side will then be visible).
- The tag attaches by its own permanent adhesive (on the tag’s white side). It self-destructs if it is pulled off the surface.

SV-UHF Sideview Mirror Tag (Read rating = 25 feet)

- The tag is installed mostly out of sight. It usually is located under the bottom edge of a rearview mirror's plastic shell.
- The tag attaches by its own permanent adhesive. It self-destructs if it is pulled off the surface.

**Type 4**

PT-UHF Portable Tag (Read rating = 15 feet)

- The tag is for temporary use only. It is easily removed from its mounting and carried by the user.
- The tag attaches by a 3M hook-fastener tape set (similar to Velcro). One piece of tape stays attached to the vehicle's non-metal surface. The other piece of tape stays attached to the tag's shell. Adhesive on the tape pieces is permanent.

VT-UHF Sunvisor Tag (Read rating = 15 feet)

- The tag is for carrying by the user. It has a slot for a chain with hook or a lanyard. (The white visor clip is ignored.)
- If the small vehicle has a sunvisor, the tag may be used as in a passenger car or truck – clipped to the visor.

HT-UHF Hangtag (Read rating = 10 feet)

- The tag is for temporary use only. The tag has a built-in “hook” for suspension from rod or cable.
- The user may need to present the tag aimed at the reader. The tag is easily carried by the user, like an elongated card.

CS-UHF Clamshell Card (Read rating = 20 feet)

- Hold the card in your fingers, braced between thumb and fingertips so that the card's full surface faces the reader.
- The card has a slot for hanging on a strap or chain with hook or lanyard. The card is easily carried by the user.

GR-UHF Graphics Card (Read rating = 15 feet)

- Hold the card in your fingers, braced between thumb and fingertips so that the card's full surface faces the reader.
- The card is shipped with no slot for hanging. Users can punch a slot if desired. Ask AWID for the slot’s locations.
- The graphics card serves also as a photo ID badge, for two-factor authentication.

KT-UHF Keytag (Read rating = 12 feet)

- This tag has a hole for keyring or keychain or lanyard. Hold the tag in your fingers so that the tag fully faces the reader.