

# Application note uPASS Reach

## Parking



This application note describes the installation of the uPASS Reach reader for parking entry control applications. The uPASS Reach can identify an AVI tag from distances up to max. 4 meters [12 ft].

### Read lobe characteristics

- Install the windshield tag horizontal on the inside of the windshield. For more information see the Windshield Tag Installsheet.
- Ensure the tag is positioned on the same side of the windshield as the reader is located.
- Present the tag in line-of-sight to the reader.
- This document is based on a windshield angle of 45°. Tilt the reader with a 45° facing the windshield to ensure optimal alignment between reader and tag.



Figure 1: detection angle 45 degrees

### uPASS Reach installed on a pole at the barrier.

#### Position reader;

- Onto a pole, located directly behind the barrier, using the pole mounting kit (7591152).
- Installation height between 1,20 and max. 2 meters from ground level.
- Use of windshield mounted tags
- Tilt the reader with a 45° facing the windshield to ensure optimal alignment between reader and tag.



Figure 2: uPASS Reach pole mounting, uPASS Reach installed at a 45° degrees angle

Item	Description	Parameters
1	Mounting height	Between 1.20 and max 2 meters [6 ft] above driving lane ground level
2	Mounting position	Onto a pole directly mounted behind the barrier
3	Frequency setting	Standard frequency, in case of multi-lane application, use frequency offset.

## uPASS Reach installed on goose neck or pedestal

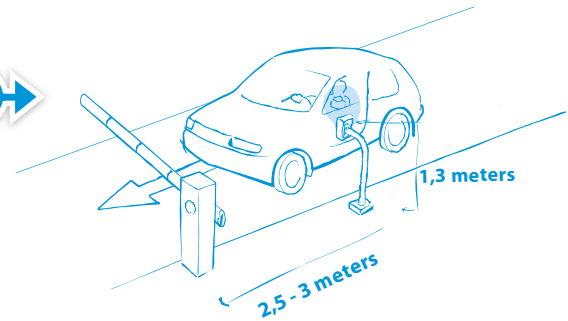
The uPASS Reach can also be mounted onto an existing goose neck or pedestal in front of the barrier, using the weather protection hood (9943803).

When there is a gate column located in front of the barrier, the uPASS Reach can be mounted directly onto the gate column.

- Use of UHF Combi Card
- Present the tag in line of sight

Item	Description	Parameters
1	Mounting height	Position the reader at about 1,3 meter [4 ft] from ground level (average car side window height).
2	Width reading angle	45°
3	Position uPASS Reach	Mounting onto an existing goose neck, pedestal or gate column. For new installations position the goose neck or pedestal 2,5 to 3 meter [8 - 10 ft] before the barrier

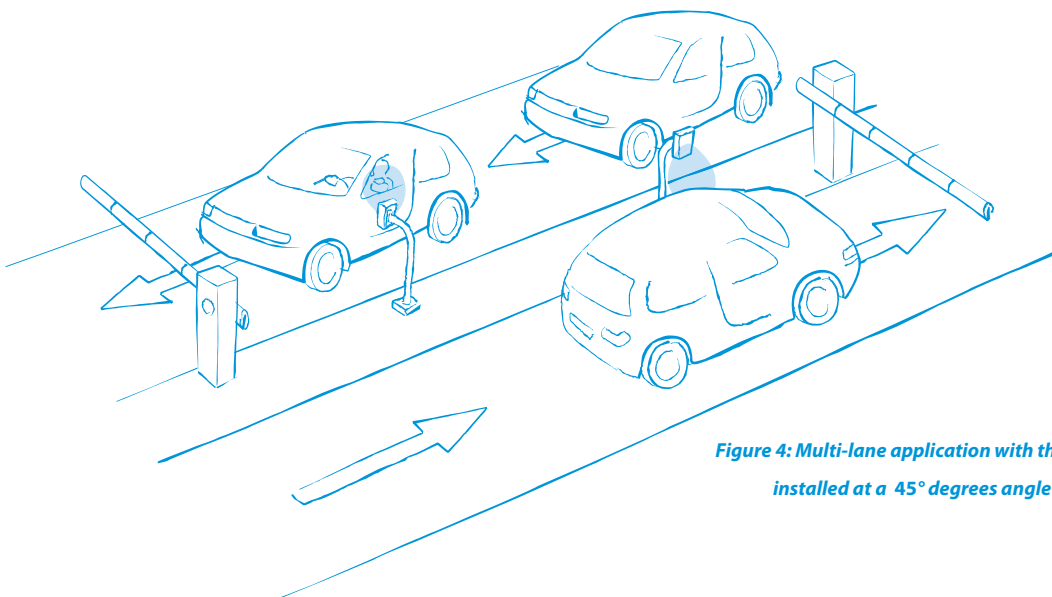
*Table : Application issues when uPASS Reach is mounted onto gooseneck*



*Figure 3: uPASS Reach is installed on a gooseneck*

## Multiple uPASS Reach readers

- One reader required per driving direction
- Use frequency offset to avoid interference. See the application note UHF dense reader mode.



*Figure 4: Multi-lane application with the uPASS Reach installed at a 45° degrees angle*