

uPASS Reach

long-range UHF reader for
vehicle identification

Key features:

- ✓ automatic vehicle identification
- ✓ read range up to 5 meters (16,4 feet)
- ✓ operates with passive UHF cards (EPC Gen 2)
- ✓ adjustable read range
- ✓ supported communication interfaces: Wiegand, RS232 and RS422
- ✓ OSDP converter optionally available



The uPASS Reach is a UHF RFID reader for long-range vehicle identification. Based on passive UHF technology, vehicles are identified up to 5 meters (16,4 feet). The uPASS Reach complies with the ISO18000-6C and EPC global Gen 2 directive.

As the uPASS Reach is used in combination with battery free UHF (EPC Gen 2) tags, the solution is cost efficient. It is ideal for convenient vehicle access to car parks, gated communities and staff parking areas.

Communication interfaces

The uPASS Reach supports a variety of industry-standard communication interfaces, such as Wiegand, clock & data and serial connections like RS232 and RS422. This enables seamless integration into any existing or new access control or parking system.

Easy installation

Featuring a slim housing, the uPASS Reach fits perfectly in any vehicle gate environment. The reader can be installed directly on a wall next to a door, or on an entry pedestal near a barrier. Mounting the uPASS Reach directly on metal does not have any impact to its performance. With the optionally available Adjustable Mounting Set, the reader can be adjusted at the desired angle to ensure reliable reading.

The uPASS Reach reader features an integrated fine-tuned antenna in a compact housing. Existing proximity Wiegand reader installations can be upgraded without additional wiring.

The reader features an IP65 (approximately NEMA 4x) certified housing, which means it can be used indoors as well as outdoors. The reader features a tamper switch to immediately provide tamper indication.

LED and beeper indication

The built-in beeper and high intensity LED provide audible and visual feedback on the identification of a tag in all operating modes.

OSDP converter

Based on RS485, the Open Supervised Device Protocol (OSDP) is an industry standard for secure communication of RFID readers. The PCC485 is optionally available to upgrade the uPASS Reach with OSDP.

Technical specifications	uPASS Reach
Part number	9942319 uPASS Reach (Region 1) 9945466 uPASS Reach (Region 2&3)
Dimensions	200 x 220 x 45 mm (7.9 x 8.7 x 1.8 in.)
Color	RAL 7035, aluminium chassis
Weight	0,75 kg (1.65 lbs)
Protection class	IP65 (approx.NEMA4x)
Material	Aluminium chassis with UL94 ABS cover
Operating temperature	-30...+60°C (-22...+140°F)
Storage temperature	-30...+60°C (-22...+140°F)
Relative humidity	10% ... 93% relative humidity, non-condensing
Power supply	12...24 VDC +10% linear supply recommended
Power consumption	1A @12VDC, 0.5@24VDC
Read range	Up to 5 meters (16,4 feet) with passive Nedap UHF tags
Operating frequency	865-868 MHz uPASS Reach Region 1 902-928 MHz uPASS Reach Region 2&3
Antenna polarization	Horizontal
Air interface	According to ISO 18000-6 C; EPC Gen 2
Communication interfaces	RS232, RS422 and USB service interface
Communication protocols	CR/LF, DC2/DC4 and various OEM protocols (see uPASS firmware guide for more information)
Relay output	1 relay output (NO, common, NC), 24 VDC 2A
Input	Read disable input; 3 x TTL general purpose inputs
Output	Wiegand, Magstripe (clock & data)
Cable specifications	Wiegand - 150 m (500 ft.) 22AWG
Tamper switch	Magnetic switch, normally closed
Standards	CE, FCC, IC, ACMA, UL294, South Korea, Vietnam, Singapore, Malaysia
Optional accessories	9875840 Adjustable Mounting Bracket 9943803 UHF Pole Mounting Kit 7591152 UHF Weather Protection Hood
Document version number	5.1