

uPASS Reach

long-range UHF reader for vehicle identification

Key features:

- ✔ automatic vehicle identification
- ✔ read range up to 7 meters* (23 feet)
- ✔ operates with passive UHF cards (EPC Gen 2)
- ✔ adjustable read range
- ✔ supported communication interfaces:
Wiegand, RS232, RS422 and RS485
- ✔ OSDP v2, including secure channel communication



The uPASS Reach is a UHF RFID reader for long-range vehicle identification. Based on passive UHF technology, vehicles are identified up to 7 meters* (23 feet). The uPASS Reach complies with the ISO18000-6C and EPC 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, RS422 and RS485. This enables seamless integration into any existing or new access control or parking system. Existing proximity Wiegand reader installations can be upgraded without additional wiring.

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 on its performance. With the optionally available Adjustable Mounting Set, the reader can be adjusted at the desired angle to ensure reliable reading.

Built for outdoor use at the perimeter

The reader features an IP65 (approximately NEMA 4x) certified housing, which means it can be used outdoors as well as indoors. The reader has 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 capability

The uPASS Reach UHF RFID reader supports the Open Supervised Device Protocol (OSDP v2) for automatic vehicle identification applications. OSDP enables advanced and secure communication between the uPASS UHF RFID reader and the controller.

** In combination with UHF Windshield Tag. The maximum read range depends on identifier type, the installation and environment.*

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	24VDC recommended, for 12VDC see wiring preconditions 12-24VDC ±10% linear supply
Power consumption	0.5A@24VDC; 1A@12VDC
Power supply wiring	Max. 50 meter (150 ft), min. AWG23/0.25mm ² @24VDC Max. 5 meter (15 ft), min AWG26/0.15mm ² @12VDC
Read range	Up to 7 meters (23 feet) with UHF Windshield Tag
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, RS485 and USB service interface
Communication protocols	OSDP v2, including secure channel communication, 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, UL294, IC, ACMA, R-NZ Consult your Nedap representative for country specific standards
Optional accessories	9875840 Adjustable Mounting Bracket 9943803 UHF Pole Mounting Kit 7591152 UHF Weather Protection Hood
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