uPASS Target

long-range UHF reader for vehicle identification

Key features:

- automatic vehicle identification
- read range up to 15 meters* (50 feet)
- operates with passive UHF tags (EPC Gen 2)
- adjustable read range
- supported communication interfaces: RS485, RS422, Ethernet and Wiegand
- OSDP v2, including secure channel communication
- Power over Ethernet plus (PoE+)



Besides vehicle identification, the uPASS Target can also be used to identify people or rolling stock. Typical applications include access control at secured perimeters and monitoring of traffic flow activities at industrial sites and logistic depots.

Communication interfaces

The uPASS Target supports a variety of industry-standard communication interfaces, such as RS422 and RS485, Ethernet, Wiegand, Magstripe/Clock & Data, . This enables seamless integration into any existing or new access control or parking system.

Easy installation

A Wall Mounting Set is standard included with the uPASS Target to ensure easy installation. With this mounting set, the reader can be adjusted at the desired angle to ensure reliable reading. The reader can be powered over the TCP-IP interface as it supports PoE+, with no need for separate power supply wiring.

Card orientation freedom

As the uPASS Target is used in combination with battery free UHF tags, the solution is cost efficient. The circular polarized antenna guarantees tag orientation freedom. This means credentials can be read at any angle as long as they are in direct line of sight of the reader.

Nedap's portfolio contains various UHF (combi) cards and special purpose UHF tags to ensure a fitting solution can be offered in any situation.



Heavy industrial equipment

Thanks to the durable IP66 rated industrial enclosure, the uPASS Target operates solidly in industrial environments and under all-weather circumstances. In case of ambient temperatures of 40°C (104°F) for higher and more than 2 hours of direct sunlight on the uPASS Target housing, a weather protection hood is advised. The uPASS Target features a connector based interfacing. All terminals are equipped with M12 industrial connectors and contra connectors, according to the latest industrial standards and quality.

LED indication

The built-in high intensity blue, green and red LED's provide the user with visual feedback that the reader is active, a tag has been read or authorized. The LED automatically indicates identification, but can also be controlled by the access control panel.

External antenna

An uPASS Target Antenna is optionally available. With this external antenna, the read-range of the reader can be extended for a wider scope. Additionally, the external antenna can be used in situations where reading of both vehicle entry and exit lanes is required.

OSDP capability

The uPASS Target 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 the environment.



Technical information	uPASS Target
Part number	9217363 uPASS Target (Region 1) 9217371 uPASS Target (Region 2&3)
Dimensions	286 x 285 x 78 mm (11.26 x 11.22 x 3.01 in)
Color	RAL 7016 (cover), RAL 9006 (chassis)
Weight	3.5 kg (7.72 lbs)
Protection class	IP66 (NEMA4x)
Material	Aluminum chassis with UL94 ABS cover
Operating temperature	-30 +66°C (-22 +150°F)
Storage temperature	-30 +66°C (-22 +150°F)
Relative humidity	10% 93% relative humidity, non-condensing
Power supply	24VDC recommended, for 12VDC see wiring preconditions 12-24VDC ±10% linear supply or Power over Ethernet plus (IEEE 802.3at)
Power consumption	0.5A@24VDC; 1A@12VDC
Power supply wiring	Max. 50 meter (150 ft), min. AWG23/0.25mm2 @24VDC Max. 5 meter (15 ft), min AWG26/0.15mm2 @12VDC
Read range	Up to 15 meters (50 feet) in combination with UHF Windshield Tag
Operating frequency	865-868 MHz uPASS Target Region 1 902-928 MHz uPASS Target Region 2&3
Antenna polarization	Circular polarization
Air interface	According to ISO 18000-6 C; EPC Gen 2
Communication interfaces	RS422 / RS485 , Ethernet 10/100Mbps and USB service interface
Communication protocols	OSDP v2, including secure channel communication, TCP-IP, CR/LF, DC2/DC4 and various OEM protocols (for more information, see firmware manuals).
Relay output	1 relay output (NO, common, NC), 24 VDC 2A
Input	2 digital input for LED control - active low inputs (0V - 5V) 1 digital input for reader disable - active low inputs (0V - 5V)
Output	Wiegand, Magstripe (clock & data)
Antenna input	1x TNC, supports external (Nedap) antenna
Connectors	Cable assembly M12 and IP67 Ethernet connectors are included
Standards	CE, FCC, UL294, UKCA, IC, ACMA, N-R2 Consult your Nedap representative for country specific standards
Included accessories	9984364 Wall Mounting Set
Optional accessories	5626595 Pole Mounting Kit 9218335 Weather Protection Hood 8500681 RS485 Accessories Set 9219021 uPASS Target Antenna (Region 1) 9219048 uPASS Target Antenna (Region 2&3)
Document version number	3.0

