

uPASS Target

long-range UHF reader for
vehicle identification

Key features:

- ✓ automatic vehicle identification
- ✓ read range up to 10 meters (33 feet)
- ✓ operates with passive UHF tags (EPC Gen 2)
- ✓ adjustable read range
- ✓ supported communication interfaces: Wiegand, Ethernet (PoE), RS422, RS485 and OSDP
- ✓ OSDP v2 supported including secure channel protocol



The uPASS Target is a high-end UHF RFID reader for long-range vehicle identification. Based on passive UHF technology, vehicles are identified up to 10 meters (33 feet). The uPASS Target complies with the ISO18000-6C and EPC global Gen 2 directive.

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 Wiegand, Magstripe/Clock & Data, Ethernet (PoE), RS422 and RS485. 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.

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 and beeper indication

The built-in high-intensity red, green, and blue LEDs provide the user with visual feedback that the tag has been read or authorized. The LED and beeper automatically indicate 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) for automatic vehicle identification applications. OSDP enables advanced and secure communication between the uPASS UHF RFID reader and the controller.

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
Material	Aluminum 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 supply recommended / PoE+ PSE IEEE 802.3at compliant
Power consumption	1.5A @12VDC, 0.75@24VDC
Read range	Up to 10 meters (33 feet) with passive Nedap UHF tags
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
Communication interfaces	RS422 / RS485 , Ethernet 10/100Mbps and USB service interface
Communication protocols	OSDP, 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
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)
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