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 and RS485
- OSDP converter optionally available



The uPASS Target is a high-end UHF RFID reader for long-range vehicle identification. Based 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. 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 LED's 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 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 Target with OSDP.



| Technical information | uPASS Target |
|--------------------------|---|
| Part number | 9217363 uPASS Target (Region 1) |
| D | 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 | 1224 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 | CR/LF, DC2/DC4 and various OEM protocols (for more information see firmware manuals). The uPASS Target is OSDP ready. |
| 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) |
| Document version nr. | 2.1 |
| | |

