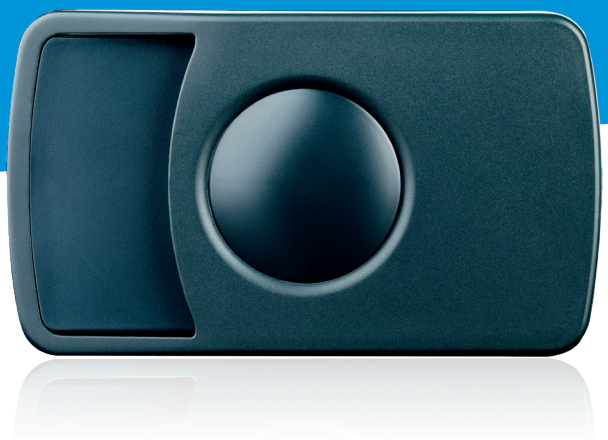
Smartcard Booster Ultimate

long-range vehicle & driver identification tag

Key features:

- simultaneous vehicle and driver identification
- identification up to 10 meters (33 feet)
- patented dual identification solution
- supported credentials: MIFARE (DESFire), LEGIC (Advant), HID iClass and Calypso
- easy mounting to vehicle's windshield
- advanced tag authentication based on AES encryption
- uses two RFID frequencies for optimized performance



The Smartcard Booster Ultimate is a vehicle and driver identification tag. This patented solution ensures that a vehicle can only get access to a secured area when driven by an authorized driver. The Smartcard Booster Ultimate is used in combination with (existing) personal access credentials. Based on semi active RFID technology, the Smartcard Booster Ultimate is identified up to 10 meters (33 feet) the TRANSIT Ultimate or TRANSIT Standard reader.

Typical applications include highly secured vehicle access at airports, seaports, military bases, utility companies, corporate and educational campuses, police, fire and other installations where vehicles must be assigned to specific drivers.

Driver based identification

The driver based vehicle identification solution consists of two elements: a building access card and an in-vehicle Smartcard Booster Ultimate. The Smartcard Booster Ultimate is mounted on the inside of a vehicle's windshield. When an authorized building access card (driver ID) is inserted into the Smartcard Booster Ultimate, it is read, combined with the vehicle ID, and then boosted to the TRANSIT reader. The TRANSIT transmits the combined ID numbers to any access control system. If this combination is authorized, access is granted and the gate opens automatically.

Building access

By removing the access card from the Smartcard Booster Ultimate Booster, it can be used for building access. The Booster solution eliminates the need to issue (new) cards, making it easily integrable into existing installations.

As the solution operates only when the access card and the Smartcard Booster Ultimate are combined, removal of the access card ensures a high level of security.

Supported smartcards

The Smartcard Booster Ultimate supports ISO14443-A and ISO15693 compliant smartcards operating on 13.56 MHz. This includes: MIFARE (DESFire), LEGIC (Advant), HID iClass and Calypso.

Windshield mounting

As the Smartcard Booster Ultimate is equipped with suction pads on the backside, it can be mounted onto the windshield easily. Thanks to this convenient design, installing the Smartcard Booster Ultimate only takes seconds.

Two frequencies

The Smartcard Booster Ultimate uses the 2,45 GHz for reliable identification and the 433 MHz frequency for advanced tag authentication* using AES standards.

Optional feature: editing card content

Since full bi-directional communication is available, the Smartcard Booster Ultimate potentially can write information on the drivers' access control card when the car enters or leaves a perimeter. Credits, offline access rights or other information could be changed dynamically upon perimeter access. This will require additional engineering effort. Please consult your Nedap representative when this optional feature is relevant to your installation.

*Note: the advanced tag authentication function is only functional when the Security Key Pack has been installed in the TRANSIT Ultimate.

Technical information	Smartcard Booster Ultimate
Part number	9982809 Smartcard Booster Ultimate
Dimensions	111 x 65 x 28 mm (4.4 x 2.6 x 1.1 in)
Color	RAL 7016 (housing), RAL 7035 (edge)
Weight	110 g (3.9 oz)
Protection class	IP32 (approx. NEMA 2)
Material	PC and TPU
Operating temperature	-40 ... +85°C (-40...+185°F)
Storage temperature	-40 ... +85°C (-40 ... +185°F)
Relative humidity	10% ... 93% relative humidity, non condensing
Read range	Up to 10 meters [33 feet] with TRANSIT Ultimate; message acceptance ratio > 80%
Operating frequency	2.45 GHz / 120 KHz / 13.56 MHz / 433 MHz
Operating modes	RO-C = read-only, switch button activation
Authentication	AES128
Supported smartcards (13.56 MHZ)	MIFARE Classic MIFARE Ultralight MIFARE DESFire (EV1) ISO 14443-3A CSN ISO 15693 UID (LEGIC Advant) HID iCLASS CSN Calypso PUPI and free files
Air interface	AES128 encryption with diversified keys; 300kbps/ GFSK 75 kHz Duty cycle < 1%; LBT not applicable Nedap proprietary encoding standard
Battery	User replaceable alkaline AAA batteries (x2) with expected lifetime of 5 years. Life time expectation is based on: Average warm climate conditions (exposure to extreme hot conditions might reduce battery life). 2.6V < Vbat < 3.3V max. 0.12A; Battery low beeper when Vbat < 2.6V
Mounting	Attaches with a suction pad to the inside of all normal windscreens*. *In case of a metalized windscreen, please contact your Nedap representative.
Compatible readers	9215689 TRANSIT Ultimate
Optional accessories	9216537 Security Key Pack
Standards	CE, FCC, IC, ACMA, R-N2
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