Smartcard Booster End2End

long-range vehicle & driver identification tag

Key features:

- ✅ simultaneous vehicle and driver identification
- ✅ identification up to 12 meters* (40 feet)
- ✅ patented dual identification solution
- ✅ supported credentials: HID IClass, HID Elite keys, HID SEOS, HID SEOS Mobile ID over NFC**
- ✅ easy mounting to vehicle's windshield
- ✅ advanced tag authentication based on End2End encryption
- ✅ uses two RFID frequencies for optimized performance

The Smartcard Booster End2End 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 End2End is used in combination with (existing) personal access credentials. Based on semi active RFID technology, the Smartcard Booster End2End is identified up to 12 meters* (40 feet) with the TRANSIT Ultimate 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 End2End. The Booster is mounted on the inside of a vehicle's windshield. The booster assists the TRANSIT reader to identify and authenticate the card ID. The TRANSIT reader transmits the combination of the card ID and booster ID 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

*In combination with the TRANSIT Ultimate reader.
The maximum read range depends on reader type, the installation and the environment.*

**At the time of release only possible with Android phones.*

End2End, 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 End2End are combined, removal of the access card ensures a high level of security.

Supported smartcards

The Smartcard Booster End2End supports the HID card technologies: HID® iClass®, HID Elite keys and the latest HID SEOS® credentials. It also supports HID SEOS Mobile ID over NFC** by tapping the booster with the mobile phone.

Windshield mounting

As the Smartcard Booster End2End is equipped with suction pads on the backside, it can be mounted onto the windshield easily. Thanks to this convenient design, installing the Booster only takes seconds.

Two frequencies

The Smartcard Booster End2End uses the 2,45 GHz for reliable identification and the 433 MHz frequency for advanced tag authentication.**

Optional feature: editing card content

Since full bi-directional communication is available, the Smartcard Booster End2End 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.

Technical information	Smartcard Booster End2End
Part number	9988483 Smartcard Booster End2End
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 12 meters (40 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	End2End encrypted authentication
Supported smartcards (13.56 MHz)	HID iClass HID Elite keys HID SEOS HID SEOS Mobile ID over NFC (Android only)
Air interface	Nedap proprietary 300kbps/ GFSK 75 kHz Duty cycle < 1%; LBT not applicable
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). $2.6V < V_{bat} < 3.3V$ max. 0.12A; Battery low beeper when $V_{bat} < 2.6V$
Mounting	Attaches with a suction pad to the inside of all normal windscreens.
Compatible readers	9215689 TRANSIT Ultimate hardware revision D.01 (or earlier in combination with Upgrade Kit.)
Optional accessories	9233741 TRANSIT TAB Upgrade Kit
Standards	CE, FCC, IC, ACMA, R-N2
Document version number	1.0

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