# SMARTCARD BOOSTER ULTIMATE\*

### | long-range vehicle and driver identification tag



#### **KEY FEATURES:**

- Simultaneous driver and vehicle identification
- Supports AES128 encrypted tag authentication
- Reading distance of up to 10 meters [33 ft.]
- Supported credentials: MIFARE [DESFire], LEGIC [Advant] and HID [iClass]
- Compact housing which suits a vehicle interior
- Easy windshield mounting with suction pads
- User activated transmission of the vehicle and driver ID
- Supports applications that require writing on the inserted smartcard
- Compatible with previous TRANSIT readers

NOTE: The advanced tag authentication of the Smartcard Booster Ultimate is only functional when the Security Key Pack has been installed in the TRANSIT Ultimate.

The Smartcard Booster Ultimate enables long-range vehicle and driver identification. Driver based identification ensures that a vehicle can never get access to a secured area unless occupied by an authorized driver. The Smartcard Booster Ultimate is used in combination with a personal access credential. It is an easy to integrate solution for vehicle access, which eliminates the need to issue new access cards. The Smartcard Booster Ultimate is available for almost all card technologies. It supports ISO 14443 or 15693 compliant smartcards (eg. MIFARE, MIFARE DESFIRE, LEGIC, Calypso and HID iClass) operating on 13.56 MHz. Depending on applied card technology either CSN or sector information can be read, see installation guide for more information.

#### **Two frequencies**

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

#### **Data storage**

Thanks to a bi-directional communication feature and in combination with Smartcard Booster Ultimate it is also possible to write information on the drivers' access control card when the car enters or leaves a perimeter. Credits, offline access rights or other information can now dynamically be changed upon perimeter access.

#### Matching vehicle and driver

The Smartcard Booster Ultimate is placed on the windshield on the inside of a vehicle. When an authorized personal access card is inserted into the Smartcard Booster Ultimate it will be read and then boosted to the external TRANSIT Ultimate reader. The reader transmits the credential ID to any standard backend security panel. If the credential is authorized and access is granted the gate will open automatically. Removal of the Driver ID is ensured by designing the system to require that the access card is also used for building access.

#### **Booster applications**

Typical applications for the Smartcard Booster Ultimate are high secured areas like airports, seaports, military bases, utility companies, corporate and educational campuses, police, fire and other installations where vehicles must be assigned to a specific driver.

\*PRELIMINARY



## **SPECIFICATIONS**

Technical information	Smartcard Booster Ultimate
Part number	9982809 Smartcard Booster Ultimate
Operating frequency	2.45 GHz, 433 MHz and 13.56 MHz (integrated antennas)
Frequency channels	433.62 හ 434.22 MHz (RX-Cat 3) Ton <5sec.
Dimensions	111 x 65 x 28 mm [4.37 x 2.56 x 1.10 in]
Weight	120 gram [4.2 oz]
Protection	IP32 [approx. NEMA 2]
Color	Anthracite, according to RAL 7016
Operating temperature	-40 +85°C [-40+185°F]
Storage temperature	-40 +85°C [-40+185°F]
Detection range	Up to 10 meters [33 feet] with TRANSIT Ultimate; message acceptance ratio > 80%
Humidity	10% 93% relative humidity, non-condensing
Mounting	Attaches with suction pads to the windscreen on the inside of a vehicle. In case of a metalized windscreen a metal free communication zone can be used.
Certification	EN60950, EMC 2014/ 30/ EC; EN301489-1,-3,-17; EN61000-6-2; EN61000-6-3; FCC Part 15; RSS-Gen; RSS-210; UL294 6th edition
Battery life	User replaceable AAA batteries with expected life-time of 5 years*.  2.6V < Vbat < 3.3V max. 0.12A; Battery low beeper when Vbat < 2.6V
Note	*Life time expectation is based on: Average warm climate conditions. Exposure to extreme hot conditions might reduce battery life.
Operating mode	C: After user activation vehicle and driver ID is transmitted (default)
Air interface 433 MHz	AES128 encryption with diversified keys; 300kbps/ GFSK 75 kHz Duty cycle < 1%; LBT not applicable
Supported smartcards (13.56 MHZ)*	ISO 14443 1/2A/3A ISO 15693 1/2/3  MIFARE CSN and optional sector information  MIFARE DESFire CSN and file data  LEGIC Advant UID  HID iCLASS CSN  Calypso PUPI and public files See for more information Smartcard Config Program
	9215689 TRANSIT Ultimate
Readers	9216537 Security Key Pack