

# TRANSIT Ultimate - long-range vehicle and driver identification reader

## Product Description

The TRANSIT Ultimate is an extremely robust RFID reader that enables simultaneous identification of vehicles and drivers in challenging situations. Based on semi active RFID technology, vehicles and drivers are identified at distances up to 15 metres\* and speeds up to 200 km/h (125 mph).

This high-end reader is designed to perform well in high security applications, demanding vehicular access control applications and under harsh environmental conditions. Typical applications include highly secured vehicle access at airports, seaports, mines, military bases, and wherever vehicles must be assigned to specific drivers.

### Channel selection

The TRANSIT Ultimate operates on a factory-set frequency. The frequency channel selection allows multiple readers to operate in close vicinity of each other without interference.

### Read range adjustment

The reader resolves typical multi-lane, entry and exit reader challenges. The read range of the reader can be adjusted, offering accurate identification in demanding applications.

### Housing

The TRANSIT Ultimate features an IP66 certified weatherproof housing. The reader operates reliably under harsh environmental conditions and can withstand exposure to rain, snow and ice.

### Interfaces & protocols

The TRANSIT Ultimate is designed for seamless and flexible integration into existing management systems in the industry, such as security, parking, traffic and logistics. Several communication interfaces are available such as RS232 (default, standard included), RS422, RS485, HID Interface Board (HIB) and TCP/IP. Open industry standards protocols such as Wiegand and OSDP are supported.

### OSDP capability

The TRANSIT Ultimate reader supports the Open Supervised Device Protocol (OSDP v2) for automatic vehicle identification applications. OSDP enables advanced and secure communication between the long-range RFID reader and the controller. For this feature the TRANSIT OSDP Interface Board is required.

## Features

- ▶ simultaneous vehicle and driver identification
- ▶ read range up to 15 metres\*
- ▶ object speed up to 200 km/h (125 mph)
- ▶ tag authentication based on AES encryption
- ▶ adjustable read range
- ▶ bi-directional communication
- ▶ variety of integrated communication interface
- ▶ robust industrial design
- ▶ OSDP v2, including secure channel communication



### Security Key Pack

A Security Key Pack is optionally available for the TRANSIT Ultimate. This enables advanced bi-directional communication between readers and tags together with secure authentication of Ultimate tags to prevent cloning and replay attacks. This function is available for the Ultimate Tag and Boosters.

\* In combination with Compact Button. The maximum read range depends on identifier type, the installation and the environment.



### Booster

Combined long-range vehicle and driver identification at up to 12 metres. Supports HID prox, EM, Nedap, MIFARE, HID iClass and LEGIC credentials. Simultaneous driver & vehicle ID.

### Compact Button

Long range ID tag. Identification at up to 15 metres. Ideal for the interior of a passenger vehicle. Easy windscreen mounting. Can be set to either automatic transmission of vehicle ID or user activated transmission of vehicle ID



### Heavy Duty Tag

Durable, weatherproof RFID tag suitable for applications requiring reliable long range identification in harsh environmental conditions. Ideal for ID of trucks, trailers, containers and fork lifts. Identification up to 20 metres.

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### Specifications

Dimensions	274 x 330 x 140 mm
Colour	RAL 7016 (cover), RAL 7035 (housing)
Weight	4 kg
Protection class	IP66 (NEMA4x)
Material	Cover ABS, Housing Die-casting ADC12
Operating temp.	-30 to +66°C
Storage temp.	-30 to +66°C
Relative humidity	10% to 93% relative humidity, non-condensing
Power supply	Input: 100-240 VAC, 0.3-0.6A (50 - 60 Hz) or 24 VDC, 0.7A Output: 24VDC, 0.1A
Power consumption	<25VA (on AC), <20 Watt (on DC)
Read range	Up to 15 metres in combination with Compact Button
Object speed	Up to 200 km/h (125 mph) at appropriate distance
Operating freq.	2.438 – 2.457 GHz, 433.62 & 434.22 MHz (RX-Cat 3) Ton <5sec.
Antenna polarisation	Circular (LHC) (2450 MHz) integrated antenna; Horizontal (433 MHz); dedicated antenna
Air interface	2.45 GHz: Nedap proprietary encoding standard 433 MHz: Encryption based upon diversified AES128; 300kbps/ GFSK 75 kHz; Duty cycle < 1%; LBT not applicable

Comm's Interfaces	Default interface board: RS232/HID Available interface boards: RS422/485, TCP/IP and OSDP USB service interface
Comm's protocols	OSDP v2, including secure channel communication, CR/LF, DC2/DC4 and various OEM protocols depending upon installed firmware - see firmware manual
Input	TTL read disable; 3x TTL general purpose inputs
Output	Wiegand, Magstripe (clock & data) 1 relay output (NO, common, NC), 24 VDC 2A, 120 V AC 1A
Antenna input	Optional 1 external inductive antenna connection 120 kHz
Antenna output	Nedap external reader antenna connection 120 kHz output
Connectors	PCB screw connectors
Tamper switch	Magnetic switch, normally closed
Standards	CE, UKCA, FCC, UL294, IC, ACMA, R-NZ, China_CMIIT Consult Nortech for country specific standards
Included accessory	9984364 Wall Mounting Set

### Ordering Information

<b>9229206</b>	TRANSIT Ultimate Custom Programming RS232/HID	<b>9948546</b>	Prox-Booster Single ID
<b>9229210</b>	TRANSIT Ultimate Custom Programming RS422/485	<b>9948538</b>	Prox-Booster 2G
<b>9229213</b>	TRANSIT Ultimate Custom Programming OSDP	<b>9948554</b>	Smartcard-Booster 2G
<b>9229216</b>	TRANSIT Ultimate Custom Programming TCP-IP	<b>9564314</b>	Window Tag Ultimate
<b>9218327</b>	Weather Protection Hood Transit	<b>9982809</b>	Smartcard Booster Ultimate
<b>9233741</b>	TRANSIT TAB Upgrade Kit	<b>9982817</b>	LEGIC Booster Ultimate
<b>9230149</b>	Compact Button - Custom Programming	<b>9988483</b>	Smartcard Booster End2End
<b>9875980</b>	Heavy Duty Tag ISO	<b>9216537</b>	Security Key Pack
		<b>9964029</b>	LEGIC Master Token Set