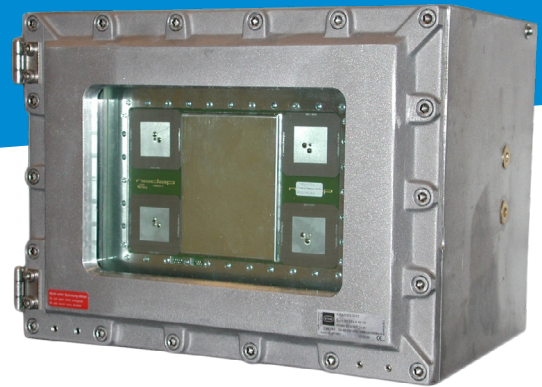# TRANSIT ATEX

ATEX IECEx certified long-range identification reader

Key features:

- ✓ ATEX IECEx certified
- ✓ simultaneous vehicle and driver identification
- ✓ reliable under harsh environmental conditions
- ✓ read range up to 10 meters (33 feet)
- ✓ object speed up to 200 km/h (125 mph)
- ✓ adjustable read range
- ✓ variety of integrated communication interfaces

The TRANSIT ATEX reader is an extremely robust RFID reader that enables long-range identification of vehicles and drivers in harsh environments. Based on semi active RFID technology, vehicles and drivers are identified at distances up to 10 meters (33 feet) and speeds up to 200 km/h (125 mph).
This reader is the certified solution in situations that require explosion-protected equipment. The TRANSIT ATEX offers the highest level of security and convenience.

Typical applications include highly secured vehicle access at chemical plants, oil & gas refineries, paint shops, cleaning facilities, milling & flour plants and tank & loading facilities for flammable gases, liquids and solids.

ATEX IECEx certified

The TRANSIT ATEX Reader is type certified with certificate number KEMA 01 ATEX2145 for use in potentially explosive atmospheres, zones 1 and 2 (gas) and zones 21 and 22 (dust). Cable connections can be made via Exd cable glands or Exe junction boxes.

Heavy Duty Tag ISO

Characterized by an excellent reading performance the TRANSIT ATEX reader can read microwave RFID tags, and allow applications in hazardous areas with the ATEX, KEMA 09A TEX0016 issue 2 certified Heavy Duty Tag ISO. More information can be found in the separate datasheet of the Heavy Duty Tag ISO.

Channel selection

The TRANSIT ATEX 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.

Interfaces & protocols

The TRANSIT ATEX 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. Also open industry-standards protocols such as Wiegand are supported. Customer specific protocols can be implemented on request.

OSDP capability

The TRANSIT Ultimate long-range RFID reader supports the Open Supervised Device Protocol (OSDP) 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.

Technical information	TRANSIT ATEX
Part number	9840990 TRANSIT ATEX
Dimensions	480 x 360 x 340 mm (18.9 x 14.2 x 13.4 in) Glass: 300 x 200 mm (11.8 x 7.8 in)
Color	Aluminium grey
Weight	50 kg (109 lbs)
Protection class	IP66
Material	Cast from marine grade copper-free aluminum alloy
Operating temperature	-30 ... +60˚C IIB -20 ... +60˚C IIB H$_2$ -30 ... +60˚C IIC
Storage temperature	-30 ... +60°C (-22 ... +140°F)
Relative humidity	10% ... 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 10 meters (33 feet)
Object speed	Up to 200 km/h (124 mph) at appropriate distance
Operating frequency	2.438 – 2.457 GHz
Antenna polarization	Circular (LHC) (2450 MHz)
Air interface	2.45 GHz: Nedap proprietary encoding standard
Communication interfaces	OSDP V2, USB, Wiegand, Magstripe (clock & data), Barcode (Code39) Default interface board: RS232 (default) Available interface boards: RS422/485, TCP/IP and HID Interface Board (HIB)
Communication protocols	OSDP V2, CR/LF, DC2/DC4 and various OEM protocols. Depending upon installed firmware. See firmware manual for more details.
Input	TTL read disable; 3x TTL general purpose inputs
Output	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	EMC Directive EC : 2014/30/EC ; 2004/108/EC EN301 489-1,-3; EN61000-6-2 ; EN61000-6-3 EN 300 440 (2.45 GHz) ATEX Certificate: KEMA 01ATEX2145 U issue : 4 ATEX ESR's : EN 60079-0:2012 + A11:2013, EN 60079-1 :2014, EN 60079-31:2014 ⟨Ex⟩ II 2 G Ex db IIB Gb T6 ⟨Ex⟩ II 2 G Ex db IIB + H$_2$ Gb T6 ⟨Ex⟩ II 2 G Ex tb IIIC Db T6
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