

My-TRANS

Microwave Identification System

MEYLE: Know-How, Know-Where, Know-When

High performance control

A high level of performance, security, reliability and convenience are required in various control and monitoring systems. MyTRANS is a long range automatic identification system. The MyTRANS reader communicates with a broad range of tags in all environmental conditions.

MICROWAVE TECHNOLOGY

MyTRANS is based on proven microwave technology in the 2.45 GHz ISM band and allows identification of tags at a distance up to 10 metres, even at high speeding passage. The Meyle MyTRANS system features radio frequency identification equipment using modulated backscatter. In this method, the tags send their code to the reader by modulating and reflecting the signal transmitted by the reader.

To reduce the influence of unwanted reflections, Meyle applied circular polarisation, which also allows orientation freedom of the tags.

Most non metallic materials are transparent for the microwave energy, and even dirt, rain, snow and ice do not affect the performance. The tags also can be mounted on a metal surface.



The MyTRANS system operates on a by factory selected and set frequency. The frequency offset allows multiple readers to operate in the same range.

A Meyle 120 kHz module is integrated in the standard version of the MyTRANS and allows an additional (inductive) antenna.

MyTRANS TAGS

The MyTRANS system has a wide range of tags for various applications. The tag circuit is energised by lithium batteries with a lifetime of 8 to 10 years. For vehicle applications this covers the lifecycle of most vehicles.

The Read/Only versions are factory pre-programmed in conformity with the customer required 6 decimal or 20 characters

Hexadecimal code. However the Read/Write tag also can be programmed inductively on site which allows applications in R/W facilities.

HEAVY DUTY TAG

The heavy duty tag is developed typical for vehicle applications requiring long range identification and exposure to harsh environmental conditions.

This tag is weatherproof protected and also applicable in explosive zones (**EX-approved**). It can be read and programmed inductively and allows easy mounting by means of bolts, screws or rivets. The operational temperature range is -30°C till + 85°C.

WINDOW-TAGS

The Meyle Window tags can be mounted easily behind the windshield of a vehicle. The Window tags are available in various types:

- The standard Window tag.
- The Window tag can optional also be equipped with an pushbutton, for applications were the driver decides the identification moment.
- Optional R/O or R/W ,for various types.



POCKET-TAG

The Meyle Pocket-tag is a microwave tag, which allows identification of people in long range handsfree applications.



UNIQUE INDUCTIVE COMPATIBILITY WITH BOOSTER

The MyTRANS system can be combined with the Meyle inductive RFID system of 120 kHz. The Meyle inductive credit card sized tag can be placed in the Booster-unit. The Booster-unit transmits this tag code to the MyTRANS reader. The Booster-unit can easily be installed behind the windshield of a vehicle.

SPECIAL TAGS

Meyle GmbH can also provide tag-solutions were the tag contains tacho-data or even operates as microwave-link between the black-box in a truck and the base station.

CERTIFICATION STANDARDS

The MyTRANS system has been certified to the European Low Voltage Directive EN60950. The system is also in accordance with the



European Directive for EMC 89/336/EEC and European electromagnetic standards, EN50081-1, EN 50082-1, EN 50082-2 and ETS 0908. The system has granted a CE certificate and is compliant to the required postal regulations for most countries. The MyTRANS heavy duty tag is certified in compliance with the standards of EN 50014(1992) and EN 50020(1994) for intrinsic protection security Eex ia IIC T4/T6.

COMMUNICATION

INTERFACES AND PROTOCOLS

Several communication interfaces to the host system are available for a broad range of industrial standards. Optional the Siemens 3964R, Profibus-DP and InterBus-S protocols are supported. In a Master/Slave configuration, communication with the other Slave-nodes is done over RS422 with a multi-drop protocol which allows a total loop-length of approximately 4800 meters.



ADVANTAGES

- Reading range up to 10 metres
- Passage speed up to 200 km/h
- Adjustable reading range
- Accurate data collection
- Multiple read optional
- Various interfaces available
- Compatible to Meyle inductive RFID system (120 KHz)
- Easy installation

With the additional monitoring and control software **MyControl** an overview of the connected hardware is displayed and settings and error tracking can be done. The program is OLE-automation supported and easy to implement in other software programs.

MyTRANS APPLICABLE FOR

Petrochemical	<i>Automatic refueling</i>
Parking	<i>On-street Off-street Residential Hospitals Corporate Universities Airports</i>
Transport	<i>Corridor monitoring Fuelling Weighing Washing Loading Black-box data transmission</i>
Traffic	<i>Pedestrianisation Toll collection</i>
Aviation	<i>Taxi dispatch systems Secured service gates Terminal bus control Commercial traffic regulation</i>
Railway	<i>Automatic refueling Yard management</i>

Technical Specifications

MyTRANS READER

<i>Housing</i>	: Plastic front on stainless steel chassis	<i>Baudrate</i>	: 9600 baud
<i>Dimensions</i>	: 310 x 250 x 100 mm	<i>Mode</i>	: Serial, Asynchronous, ASCII
<i>Weight</i>	: < 5kg	<i>Data/parity/stopbits</i>	: 7, even, 1
<i>Protection class</i>	: IP65	<i>Outputs</i>	: Barcode 39, Wiegand 26-bit, Wiegand FF56, Omron ISO 7811/2
<i>Relatively humidity</i>	: 10...93% non condensing	<i>Relay output</i>	: 1, dry contact (NO, Common, NC)
<i>Temperature range (operating)</i>	: -30°C... + 70°C	<i>Modulator input</i>	: To any Meyle inductive reader
<i>Temperature range (storage)</i>	range : -40°C... + 85°C	<i>Inputs</i>	: 1 dry contact or TTL
<i>Identification range</i>	: Typical up to 10 metres		
<i>Range check</i>	: Acoustic by built-in beeper		
<i>Object speed</i>	: Up to 200 km/h		
<i>Power supply</i>	: 230 VAC + 10%, 125 mA, 50-60 Hz / 22...30 VDC, max. 1 A		
<i>Power consumption</i>	: < 25 VA (on AC), < 20 Watt (on DC)		
<i>Frequency</i>	: 2400 MHz...2483.5 MHz		
<i>Number of channels</i>	: 140, only factory selected, channel spacing 600 KHz		
<i>Polarisation</i>	: Circular (LHC)		
<i>Adjustable power</i>	: 3...23 dBm EIRP		
<i>Interfaces</i>	: RS 232-C, RS 422, 20 mA-CL		
<i>Communication protocols</i>	: DC2/DC4, CR/LF, S3964R, InterBus-S, ProfiBus-DP		
		<i>Number of badges</i>	: 1,000 (in the series 1-120.000)
		<i>Number of events</i>	: 100 events and 20 alarms
		<i>Door contact</i>	: Standard
		<i>Lock control</i>	: Relay with make-and-break contact
		<i>Day zones and time zones</i>	: Programmable via WinXS software
		<i>Clock</i>	: Internal with calendar
		<i>Back-up battery</i>	: Yes
		<i>Slave communication</i>	: Via Meyle Multidrop board II
		<i>Digital inputs</i>	: 2, intend. for dry contact or open collector (TTL)
		<i>Relay outputs</i>	: 1, dry contact (NO, Common, NC)
		<i>Auxiliary power output</i>	: 22-30 VDC, 500 mA

MyTRANS READER EXTENDED

For more information, please contact us.

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ACCESSORIES

- Wall-Mount Bracket
- Pole Mount Bracket
- Inductive programming unit
- Inductive reading equipment
- Inductive proximity antenna's
- Portable inductive reader
- MyControl monitoring and control software