

My-IDENT...

Industrial Identification Program

High performance RFID

MyIdent is the new program of inductive Radio Frequency Identification readers/writers.

It was developed with the benefits of the considerable experience which has been achieved during the past 30 years in the RFID area. A high level of performance, security, reliability and convenience is required in various control and monitoring systems. This resulted in world-wide field-proven RFID systems in various applications.



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

RADIO FREQUENCY IDENTIFICATION

The Meyle RFID system consists basically of a reader/writer, an antenna and a tag. The reader/writer communicates through inductive coupling of its antenna with the tag. Due to the passive identification technology the tags don't need a battery. The tags are energized by the emitted electromagnetic energy supplied by the antenna connected to the reader.

Unlike other kinds of identification systems, the Meyle RFID technology does not require line-of-sight. Most non-metallic materials are transparent for the electromagnetic energy. A broad range of tags can be read contact less in all environmental conditions even when moist, dirt and tough mechanical circumstances appear.

MEYLE SYSTEM-TECHNOLOGY

MyIdent is based on proven inductive radio frequency technology in the ISM band and allows identification of Meyle tags at a distance up to 150 cm.

The MyIdent system utilizes Phase Modulated (PM) radio frequency technology operating according to the Full-Duplex (FDX-B) principle. In this method, a protocol allows to transmit data in both directions at the same time, to guarantee very fast communication times; a necessity in modern dynamic processes.

MYIDENT READER-WRITER UNITS

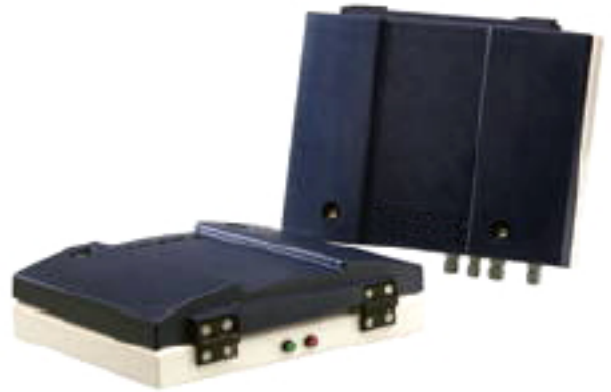
The Myldent units are compact devices combining low power consumption with an excellent reading or programming performance. The Myldent units are able to capture the latest generation, phase modulated RFID tags. Invulnerability to environmental disturbances is warranted due to the equipment's industrial design. The units can be supplied with pre-tuned built-in antenna's, with external antenna's or combined.

Free programmable in-outputs are available to control external sensors and actors without additional hardware. When communication is temporary disabled, the events will be stored in an event buffer. The Myldent units operates from all common DC power supplies and has a housing suited for easy mounting. Built-in interfaces to the host system are available for a broad range of industrial standards.



MYIDENT, A FULL RANGE OF ANTENNAS

Different sizes of standard antennas are available to co-operate with the Meyle Myldent program of readers and tags. The conductive structure of the antennas are specifically designed to receive and transmit the modulated electromagnetic energy. For easy tuning of the antenna a Field Strength Indicator is available. Connected to a Myldent unit the required energy for the tags is transmitted and simultaneously the tag-code is received. Read-Write applications are possible in order to cover most common requirements.



The Meyle RFID-antenna's are specially designed to withstand moisture, dirt and rough handling in order to survive in rough industrial environments. Due to the included antenna cable and prepared fixing holes, installation is easy to achieve. Combined with an optional Adjustment Box the cable length, between the reader and the antenna, can be expanded to 55 metres. With the synchronisation feature mutual distances between antennas's can be, depending on the antenna size, decreased to a minimum.

THE MYIDENT TAG PROGRAM

The Myldent system has a wide range of industrial tags for various applications. Different sizes and shapes are. The tags are designed to operate for a long period of time in rough industrial environments.

Whether it concerns temperatures from -40°C up to 150°C, moist

or tough mechanical circumstances, the tags



are equal to their task. Even in an area of resistance to chemicals an excellent performance is shown. Limited solutions of e.g. Acids, bases or hydrocarbons do not affect the tag's operation.

The embedded EEPROM chip is suited to store and recover new programmed data for many times in Read Write facilities. Of course customer defined pre-programmed (Read Only) tags are also available.

All tags in the Meyle program fully comply with the required regulations according the CE- and EMC guidelines. Depending on the application and required detection range the Meyle tag program always offers the right tag. Direct mounting on various surfaces, even on or embedded in (non-) ferrous metals is possible due to the FDX-B principle.

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 multidrop protocol, which allows a total loop length of approximately 4800 metres. With the additional monitoring an control software Control IT an overview of the connected hardware is displayed and settings and error tracking can be done. The OLE-automation supported driver ITerminal® allows easy implementation in other software programs.

ADVANTAGES

- Industrial design
- Reading range up to 120 centimetres
- Various sized and shaped
- Broad antenna program
- Low power consumption
- Dynamic identification to 5 m/s
- Highly reliable data collection
- Easy installation
- Low maintenance level
- Synchronisation for near operations
- Multiple read optional
- Various interfaces available

MYIDENT APPLICABLE FOR

- Production Automation
- Container and tool management
- Tracking and tracing of assets
- Hands free registration
- Traceability of food by slaughter hook & meat tray identification

OVERVIEW READERS MYIDENT PROGRAMME

The GIII-CM operates only from a 24VDC power supply and has an IP65 protected housing. The GIII CM can be part of a master/slave (multidrop) loop by means of a slave device.

Participation in several standardised industrial sensor- and actor networks is also one of the systems feature.

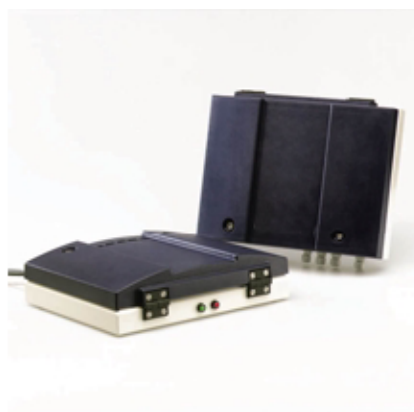
Supplied with a build in and pre-tuned antenna easy installation is assured.

Technical Specifications GIII-CM

G III - CM READER

- *Article number* : 9883703
- *Housing* : ABS fire class 5V
- *Dimensions* : 310 × 250 × 80 mm
- *Weight* : < 2 kg
- *Protection class* : IP 65
- *Operating frequency* : 120 / 125 kHz
- *Reading ranges* : Up to 60 cm with built in antenna
Up to 120 cm with external antenna
- *External indicators* : Red and green led
- *Relatively humidity* : 10-93% non condensing
- *Temperature range (operating)* : - 20 °C.. + 40 °C
- *Temperature range (storage)* : - 30 °C.. + 70 °C
- *Power supply* : 24 VDC
- *Interfaces* : RS 232, RS 422 (optional boards),
20 mA-Current Loop (TTL), InterBus-S
or Profibus-DP
- *Communications protocols* : DC2/DC4, CR/LF, S3964R,
Multi-Drop(Master-Slave), TCP/IP

- *Antenna connections* : 1 built-in pre-tuned antenna
1 optional external antenna
- *Outputs* : Optional: 1 potential free contact
:



CERTIFICATION STANDARDS

The program has been certified to the European Low Voltage Directive EN60950. The program is also in accordance with the European Directive for EMC. The program has granted a CE certificate and is Compliant to postal regulations according to EN 300-330.

These specifications are subject to change without prior notice

ACCESSORIES

- Adjustment box for increased antenna lengths
- Field Strength Indicator
- Several communication interface boards
- Handheld RFID-reader for all Meyle tags
- ITerminal® OLE-automated driver software
- Customer-made software interfaces

GIII & GIII-B READER

The Meyle GIII and GIII-B readers are characterised by an excellent reading performance. They can read the complete range of passive Meyle RFID tags. Contrary to the GIII, the

GIII-B operates only from a DC emergency supply and has a housing suited for rail mounting. Both types can be a part of a Multidrop loop in the shape of slave units. Participation in several standardised industrial sensor-and actor networks is also one of the systems feature.

Technical Specifications GIII

G III

• <i>Article number</i>	:		• <i>Interfaces</i>	:	RS 232, RS 422, 20 mA-Current Loop (TTL), InterBus-S or Profibus-DP, TCP/IP
• <i>GIII</i>	:	9883894			
• <i>GIII IP65</i>	:	9841423			
• <i>GIII IP65 Stainless steel</i>	:	9842136			
• <i>Housing</i>	:	Steel with ABS covers	• <i>Communication protocols</i>	:	DC2/DC4, CR/LF, S3964R, Multidrop
• <i>Dimensions</i>	:	275x240x75 mm	• <i>Antenna connections</i>	:	1 optional external antenna
• <i>Weight</i>	:	2,8 kg			
• <i>Protection class</i>	:	IP 30, Optional IP65, IP65 stainless steel			
• <i>Operating frequency</i>	:	120 kHz			
• <i>Reading ranges</i>	:	Up to 120 cm with external antenna			
• <i>Relatively humidity</i>	:	10-93% non condensing			
• <i>Temperature range (operating)</i>	:	0 °C .. + 40 °C			
• <i>Temperature range (storage)</i>	:	- 30 °C .. + 70 °C			
• <i>Power supply</i>	:	230...240 V _{AC} ± 10, 50...60 Hz or 22...30 V _{DC} , max 1,4A			
• <i>Power consumption</i>	:	25 VA			
• <i>Baudrate</i>	:	1200...9600			
• <i>Outputs</i>	:	Optional 1 potential free (NO, common and NC) outputs			
• <i>Mean Time Between Failure (MTBF)</i>	:	>40 years			
• <i>Mean Time To Repair (MTTR)</i>	:	<1 hour			

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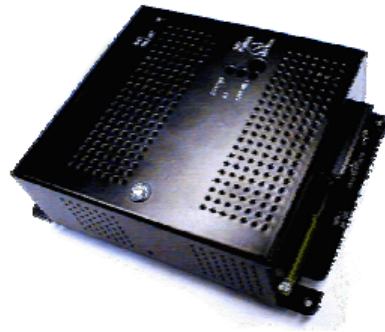
Compliant to postal regulations according to EN 300-330.

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Technical Specifications GIII-B

G III B

- *Article number* : 9846590
- *Housing* : Steel, suited for rail mounting
- *Dimensions* : 157x209x80 mm
- *Weight* : 1,5 kg
- *Protection class* : IP 30
- *Operating frequency* : 120 kHz
- *Reading ranges* : Up to 120 cm with external antenna
- *Relatively humidity* : 10-93% non condensing
- *Temperature range (operating)* : 0 °C .. + 40 °C
- *Temperature range (storage)* : - 30 °C .. + 70 °C
- *Power supply* : 22...30 VDC
- *Power consumption* : 25 VA
- *Baudrate* : 1200...9600
- *Outputs* : Optional 1 potential free (NO, common and NC) outputs
- *Mean Time Between Failure (MTBF)* : >40 years
- *Mean Time To Repair (MTTR)* : <1 hour
- *Interfaces* : RS 232, RS 422, 20 mA-Current Loop (TTL), InterBus-S or Profibus-DP, TCP/IP
- *Communication protocols* : DC2/DC4, CR/LF, S3964R, Multidrop
- *Antenna connections* : 1 optional external antenna



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SUPERGIS III READER

The Supergis III is the central unit of a RFID network.

Together with the connected antenna it is able of reading all Meyle passive RFID tags. Besides the decoding of tags the SGII controls the interfacing to the other components in the

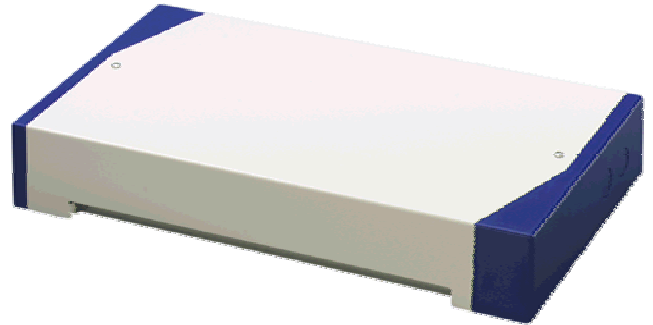
network and is able of handling the communication to the host in various ways.

The SuperGIS III can operate from all common AC main supplies as well as a DC emergency supply. The build in I/O board gives the opportunity to control several sensors and actors without additional hardware.

Technical Specifications SuperGIS III

SuperGIS III

- *Article number* :
 - SG III 9841253
 - SG III 100-120 V 9883878
 - SG III IP65 Stainless steel 9838902
- *Housing* : Steel with ABS covers
- *Dimensions* : 410x240x75 mm
- *Weight* : 4,3 kg
- *Protection class* : IP 30
Optional IP65 Stainless Steel
- *Operating frequency* : 120 kHz
- *Reading ranges* : Up to 120 cm with external antenna
- *Relatively humidity* : 10-93% non condensing
- *Temperature range (operating)* : 0 °C .. + 40 °C
- *Temperature range (storage)* : - 30 °C .. + 65 °C
- *Power supply* : 230...240 V_{AC} ± 10,
50...60 Hz or 22...30 V_{DC}, max 1,4A
- *Power consumption* : 50 VA
- *Baudrate* : 1200...9600
- *Build in clock* : Yes, time in hours/minutes/seconds
- *Backup* : Backup battery (4 years)
- *Inputs* : 1 potential free or open collector, extension up to 5 inputs optional
- *Outputs* : 1 potential free (NO, common and NC), extension up to 5 outputs optional
- *Mean Time Between Failure (MTBF)* : 40 years
- *Mean Time To Repair (MTTR)* : <1 hour
- *Interfaces* : RS 232, RS 422, 20 mA-Current Loop (TTL), InterBus-S or Profibus-D, TCP/IP
- *Communication protocols* : DC2/DC4, CR/LF, S3964R, Multidrop
- *Antenna connections* : 1 optional external antenna



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GW II READ/WRITE UNIT

The GW II read write device is a Radio Frequency Identification unit (RFID). It can read and write the complete pallet of the passive R/W Meyle RFD-tags. Invulnerability to

environmental disturbances is warranted due to the equipment's industrial design.

The GWII operates from an AC or DC power supply and has IP65 housing.

Technical Specifications GWII Read-write unit

GW II

- *Article number* :
GWII IP65 : 9839941
GWII IP65 Stainless steel : 9842071
- *Housing* : IP65, optional Stainless steel
- *Dimensions* : 90 x 200 x 300 mm
- *Weight* : 4,3 kg
- *Protection class* : IP 65Stainless Steel
- *Operating frequency* : 120 kHz
- *Relatively humidity* : 10-93% non condensing
- *Temperature range (operating)* : 0 °C .. + 40 °C
- *Temperature range (storage)* : - 40°C .. + 60°C
- *Power supply* : 100...240 VAC ± 10%,
50...60 Hz or 12...15 VDC
- *Power consumption* : 10 VA
- *Baudrate* : 9600
- *Inputs* : 2 inputs
- *Outputs* : 1 relays output
- *Mean Time Between Failure (MTBF)* : >40 years
- *Mean Time To Repair (MTTR)* : <1 hour

- *Interfaces* : RS 232
- *Communication protocols* : DC2/DC4



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TRANSPONDER OVERVIEW

The Meyle RFID-tags are available in various shapes and sizes. They operate on a frequency of 120 kHz according the FDX-B principle and due to the passive identification technology the tags don't need a battery. The required energy is supplied through the concerned reader and antenna. Nevertheless detection ranges up to 1,2 m are feasible. The Meyle RFID-tags are specially designed to operate for a long period of time in rough industrial environments. Whether it concerns temperatures from -40 °C up to 150 °C, moist, or

tough mechanical circumstances, the tags are equal to their task. Even in the area of resistance to chemicals an excellent performance is shown. Limited solutions of e.g. Acids, bases or hydrocarbon do not affect the tag's operation.



Technical Specifications Transponders

Technical information	LR12	LR22	LR22HT	MR25	LR40	LR40HT	LR85	LCC
Dimensions [mm]	Ø 12 x 5	Ø 22 x 10	Ø 22 x 10	Ø 25 x 1,5	Ø 40 x 8,5	Ø 40 x 8,5	Ø 85 x 13	86 x 55 x 2,6
Protection	IP65	IP67	IP68	IP54	IP67	IP68	IP65	IP54
Operating temperature [°C]	-20 .. 90	-30 .. 80	-40 .. 110	-10 .. 50	-30 .. 90	-30 .. 110	-20 .. 70	-10 .. 70
Detection range [cm]**	22	45	45	35	70	70	120	85
Programming range [cm]**	3	6	6	4	10	10	10	7
Type	Read only / Read write							
Memory size [bits]	128							

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* See Technical information 'Tag mounting instructions'

**Depending on used tag, for complete overview see Technical information 'Detection/Programming ranges FDX-B tags'

For more information, please contact us.

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