



PRODUCT OVERVIEW

IDENTIFICATION SYSTEMS



FACTORY AUTOMATION

IDENT-M

MICROWAVE

IDENTIFICATION

SYSTEMS

A Question of Application

Tolerance selection

In this system, precision clutch release bearings are assembled. The pallets in the pallet rotary system are fitted with inductive data carriers. The individual parts of the bearings are measured automatically, and the data stored in the data carriers. At the assembly point, the components are assembled automatically with the help of the data, in such a way that there is a minimal amount of play in the bearing.

Identification in automobile assembly

A data carrier is attached to each vehicle body as it enters the assembly line and model-specific data are written to it. At the identification points for the different assembly sections, the test computer or assembly computer requests the data from the higher level control system. The data required for the subsequent manufacturing process is written to the data carrier.



Microwaves or inductive identification systems

It is widely accepted that object recognition represents a central task in the automation and interfacing of processes when automating factories. By the same token, few would dispute that the market offers a wealth of technical alternatives for carrying out this task. It can sometimes be extremely difficult for a user to choose a system for a particular application. Once a fundamental decision has been made in favour of an electromagnetic identification system, the decision-making process beyond that becomes relatively straightforward.

With its various inductive and microwave identification systems, Pepperl+Fuchs has the right system for virtually every application.

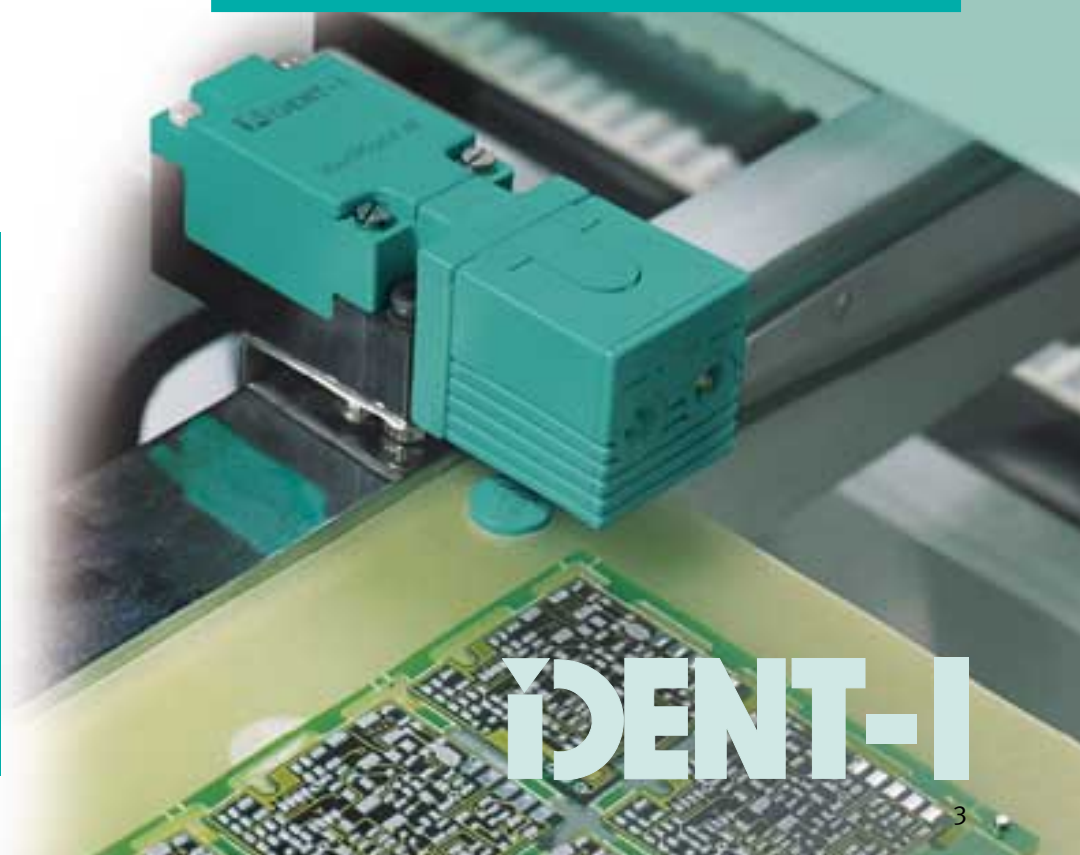
INDUCTIVE

IDENTIFICATION

SYSTEMS

Identification in SMD assembly

When a fix-code identification system is used to control the entire SMD assembly process, it becomes possible to interface various manufacturing tasks. The inductive identification system recognises the task and causes the machine to load the correct assembly program and the correct components.



IDENT-I

IDENTIFICATION SYSTEMS

PRODUCT OVERVIEW

In recent years the automatic identification of objects has found its way into nearly all areas of industry. The technique provides information on products, goods and personnel and thus enables a connection to be established between data and the flow of material. In coarse industrial environments the trend has been increasingly towards the application of electromagnetic identification through Radio Frequency Identification (RFID). And with its various inductive and microwave ident systems, Pepperl+Fuchs offers the ideal basis for almost all applications.

Inductive identification systems

Inductive systems are particularly suited to applications in the areas of automation, material flow control on production lines, operating data acquisition and the identification of objects such as storage containers, pallets, tool carriers and the like.

Advantages

- Read/write distances up to 10 cm
- High read/write speeds
- Memory up to 8 kbytes
- Battery-free code and data carriers
- Code/data carriers with increased temperature ranges and Ex-certification
- All the important field bus interfaces are available

Microwave identification systems

Coarse industrial conditions are encountered in the basic construction area of the motor industry and large ranges are also required. This is where microwave sensors come into their own.

Advantages

- Choose between two alternative systems, both operating in the ISM band from 2.45 GHz
- Read/write distances up to 5 m
- Memory capacity up to 32 kbytes
- Fixed code and read/write system
- Simultaneous reading of several data carriers
- Multi-tag capability means that many data carriers can be read

	IDENT-I		IDENT-M	
	System V	System P	System V	System T
Control units				
Read/write heads				
Code/data carriers				



SELECTION CRITERIA

The first question to be answered is whether unambiguous identification of the object is sufficient or whether important, modifiable data should also be assigned to the object. This decision determines the choice between a fixed code system and a read/write system.

The assembly conditions essentially define the requirements for the read intervals or read/write intervals, i.e. the maximum distance

between antenna and data carrier. The cycle times of the application, on the other hand, determine how quickly data must be read or the speed with which new data must be written to the data carrier.

The volume of data provided determines the memory capacity of the data carrier. Above a certain volume the use of battery-buffered data carriers becomes unavoidable.

As a result of the increasing interfacing of plants or plant components, the number of field bus interfaces available assumes ever more significance. Not least, questions of industrial management have to be resolved when making decisions about investment. In addition to the initial costs, the significantly more important question of the "cost of ownership" needs to be sufficiently clarified.

Comparison of Pepperl+Fuchs Identification Systems	Inductive		Microwave	
	IDENT-I System V	IDENT-I System P	IDENT-M System V	IDENT-M System T
Read distance	≤ 100 mm	≤ 80 mm	≤ 2000 mm	≤ 6000 mm
Write distance	≤ 68 mm	≤ 45 mm	≤ 2000 mm	≤ 500 mm
Memory capacity	1 kbit (passive) 64 kbit (active)	928 bit R/W plus 64 bit R/o	256 kbit	574 bit
Fix-code system	available	available	not available	available
Interfaces	RS232, RS422, RS485, 20 mA TTY PROFIBUS DP INTERBUS Remote I/O DeviceNet	RS232, RS485, RS422 20 mA TTY PROFIBUS DP INTERBUS DeviceNet EtherNet	RS232, RS422 PROFIBUS DP INTERBUS Remote I/O EtherNet	RS232, RS485
Max. temperature for special code/data carriers	150 °C	200 °C	70 °C	85 °C
System costs based on: System P = 1.00				
10 read stations 100 code carriers	1.43	1.00	not available	6.73
30 read/write stations 1000 data carriers	1.58	1.00	8.60	4.82
Special features	<ul style="list-style-type: none"> ■ Devices with explosion protection approval ■ All important field bus interfaces ■ Large selection of read/write heads ■ Up to four heads/control unit 	<ul style="list-style-type: none"> ■ Inexpensive code and data carriers in versatile forms ■ Read/write head with integrated control unit ■ Control unit for the control cabinet for up to 4 heads with display and direct operation 	<ul style="list-style-type: none"> ■ High data transfer rate ■ Large read/write distances ■ Addressable data carriers 	<ul style="list-style-type: none"> ■ Movement detection ■ A number of data carriers can be read simultaneously

IDENT-I

SYSTEM V

The **System V** makes use of code and data carriers.

CODE CARRIERS

The code carriers are permanently coded, and their unique number – the code – is mask-programmed during the chip manufacturing process. This code refers to a corresponding data set in a database. Of the 64 bits of the mask-programmed ROM, 28 bits are used for the code. A further 20 bits are used for code security, and the remaining 16 bits are unused. This manufacturing process produces components that are completely forgery-proof.

Code carriers

Type	Dimensions (d x h)	Read distance in mm (1)	Special features	Figure No.
ICC-8	8 x 5	15		①
ICC-10	10 x 4.5	15		②
ICC-12	12 x 6	25		③
ICC-12-T1	12 x 6	20	-25 °C ... +130 °C	⑤
ICC-16GK	M16 x 1 x 6	25	with external thread	⑥
ICC-30	30 x 17	53		④
ICC-30F	30 x 17	53	with fixing flange	⑫
ICC-30GK	M30 x 1.5 x 20	53	with external thread	⑦
ICC-30GK-T1	M30 x 1.5 x 20	58	-25 °C ... +130 °C	⑩
ICC-30GK-T3	M30 x 1.5 x 20	58	-25 °C ... +110 °C	⑪
ICC-50	50 x 8	100	with centre fixing hole	⑧
ICC-50F	50 x 50 x 8	100	with fixing flange	⑨

(1) Data for installation „not in metal“ and with an optimum combination of code carrier and read head

Code carriers for hazardous areas

ICC-30-EXIA	30 x 17	17	for hazardous areas	⑭
ICC-30F-EXIA	30 x 17	17	for hazardous areas	⑮
ICC-30GK-EXIA	M30 x 1.5 x 20	17	for hazardous areas	⑯

(1) Data for installation „not in metal“



Data carriers with 1 kBit memory (EEPROM)

Type	Dimensions (d x h)	Read distance in mm (1)	Write distance in mm (1)	Figure No.
IDC-8-1K	8 x 5	14	10	①
IDC-10-1K	10 x 4.5	14	10	②
IDC-12-1K	12 x 6	24	17	③
IDC-15-1K	15 x 9	30	24	⑤
IDC-16GK-1K	M16 x 1 x 6	30	24	⑥
IDC-24-1K	24 x 11	47	43	without fig.
IDC-30F-1K	30 x 20	50	43	⑫
IDC-30GK-1K	M30 x 1.5 x 20	50	43	⑪
IDC-50-1K	50 x 7	95	80	⑧
IDC-50F-1K	50 x 50 x 7	95	80	⑨

Data carriers 64 kBit memory RAM battery-powered

IMC-40-64K	70 x 40 x 22	68	68	⑬
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(1) Data for installation "not in metal" and with an optimum combination of data carrier and read/write head

DATA CARRIERS

The **System V** read/write system operates with battery-free and battery-powered data carriers. The battery-free data carriers contain EEPROM memory with a storage capacity of up to 1 kBit. The test information for data security is stored in additional memory cells. The fact that this does not depend on a built-in power supply means that these data carriers can be constructed with similar physical dimensions as permanently coded systems. With the battery-powered data carriers, the number of write cycles is only limited by the battery life time.

Data carriers for hazardous areas with 1 kBit memory (EEPROM)

IDC-30-EXIA-1K	30 x 17	10	9.5	⑭
IDC-30F-EXIA-1K	30 x 17	10	9.5	⑮
IDC-30GK-EXIA-1K	M30 x 1.5 x 20	10	9.5	⑯

(1) Data for installation „not in metal“



CONTROL UNITS

The control units are located in the field-proven terminal housing for installation in the control cabinet (K-System). Depending on the model, the width of the housing is 60, 80 or 100 mm.

Control units for four read/write heads IVH...

Type	Width in mm	Interfaces	Supply
IVI-KHD2-4HB5 IVI-KHA6-4HB5	80	INTERBUS	18 32 V DC 90 ... 253 V AC
IVI-KHD2-4HB6 IVI-KHA6-4HB6	80	PROFIBUS DP	18 32 V DC 90 ... 253 V AC
IVI-KHD2-4HRX IVI-KHA6-4HRX	60	RS232, RS422, RS485, TTY	18 32 V DC 90 ... 253 V AC



Type IVI-KHD2-4HB6

BUS COUPLERS

The bus couplers link control units, which have only one serial interface, with a field bus. This is achieved by connecting the serial interface of the bus coupler with the control unit of the identification system, and connecting the bus connection to the field bus.

Bus coupler

Type	Width	Interfaces
KHD2-IVI-AB1	40	Allen Bradley Remote I/O
IVI-F47-DN1		DeviceNet

READ HEADS, READ/WRITE HEADS

The choice from a range of five different read or read/write heads and an even wider variety of code and data carriers offers you great flexibility with respect to the requirements of your automation task. No other system offers you the same degree of flexibility!

Read/write heads

Protection class IP67
Operating temperature 248 Kelvin ... 343 Kelvin (-25 °C ... +70 °C)

Type	Connection type	Figure No.
IVH-18GM-V1	plug connector-V1	①
IVH-30GM-V1	plug connector-V1	②
IVH-F61	cable 2 m	⑤
IVH-FP3	terminal compartment	④
IVH-M1K	terminal compartment	③



④



①



②



⑤



③

IDENT I

SYSTEM P

This inductive identification system is a read/write system, which communicates by means of amplitude modulation between the read heads and the data carriers. The use of 125 kHz technology means that the system is an extensively open one, so that many of the data carriers of other manufacturers that are available on the market can also be used. Various bus interface devices are available for making the connection to higher level control systems, so that the system is also an open one in this respect. Devices satisfying the IP67 protection class, for use in the field, are available for the various applications, as are devices for control cabinet installation. Parameter assignment is a straightforward procedure, either direct via the evaluation devices or using a PC and the free-of-charge IDENT 2005 software. All in all this is a very flexible system, which can accommodate expansion and adaptation to existing plant systems.

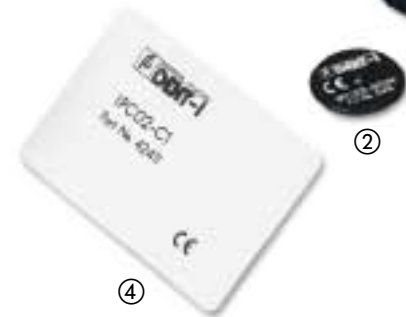


Code carrier not for mounting on metal

Data carriers not for mounting on metal

Data carriers embeddable in metal

Order code	Description	Technical Data	Fig.
IPC02-20W	Battery-free code carrier Diameter 20 mm, thickness 2 mm	40 bit Fixcode both sides readable	①
IPC02-30W	Battery-free code carrier Diameter 30 mm, thickness 2 mm	Number of read cycles unlimited protection class IP67 to EN 60529	②
IPC02-50W	Battery-free code carrier Diameter 50 mm, thickness 2 mm	housing material: PC ambient temperature -25 °C ... +70 °C	③
IPC02-C1	Battery-free code carrier in ISO- cheque card format (85 x 54 x 0.8) mm	as above, but housing material: PVC, ambient temperature 0 °C ... +50 °C	④
IPC02-16	Battery-free code carrier Diameter 16 mm	as above, but housing material: highly chemical-resistant Epoxy, ambient temperature -25 °C ... +85 °C, protection class IP 68	without
IPC02-26-T6	Battery-free high temperature code carrier Diameter 26 mm, thickness 4 mm	as above, but ambient temperature -20 °C ... + 85 °C (shortly up to 150 °C)	⑤
IPC02-68-T7	Battery-free high temperature code carrier Diameter 68 mm, thickness 11.5 mm	as above but ambient temperature -40 °C ... + 140 °C, temperature cycles up to 200 °C and shortly up to 300 °C	⑥
IPC03-20W	Battery-free data carrier Diameter 20 mm, thickness 2 mm	32 bit Fixcode on ROM and 928 bit memory on EEPROM both sides can be read and written to;	①
IPC03-30W	Battery-free data carrier Diameter 30 mm, thickness 2 mm	number of read cycles unlimited; number of write cycles > 100,000 protection class IP67 to EN 60529	②
IPC03-50W	Battery-free data carrier Diameter 50 mm, thickness 2 mm	coil in ferrite core for embedded installation in metal housing material: PBT (up to M30: PP), potting compound/ hardener CY 221/HY 2966	③
IPC03-20K1	Battery-free data carrier as key-tag external diameter approx. 31 mm	ambient temperature -25 °C ... +70 °C	without
IPC03-C1	Battery-free data carrier im ISO- cheque card format (85 x 54 x 0,8) mm	as above, but housing material: PVC, ambient temperature 0 °C ... +50 °C	④
IPC10-20W	Battery-free data carrier Diameter 20 mm, thickness 2 mm	EEPROM with 128 bit memory, of which 96 bit freely available both sides can be read and written to, number of read cycles unlimited, number of write cycles > 100,000, protection class IP67 to EN 60529 housing material: PC, ambient temperature -25 °C ... +70 °C	①
IPC03-12	Battery-free data carrier Diameter 12 mm, height 6 mm	32 Bit Fixcode on ROM and 928 Bit memory on EEPROM both sides can be read and written to number of read cycles unlimited; number of write cycles > 100,000 protection class IP67 on EN 60529 housing material: PC ambient temperature -25 °C ... +70 °C	⑦
IPC03-16GK	Battery-free data carrier Diameter M16, height 6 mm		⑧
IPC03-24	Battery-free data carrier Diameter 24 mm, height 11 mm		⑨
IPC03-30GK	Battery-free data carrier Diameter M30, height 20 mm		⑩



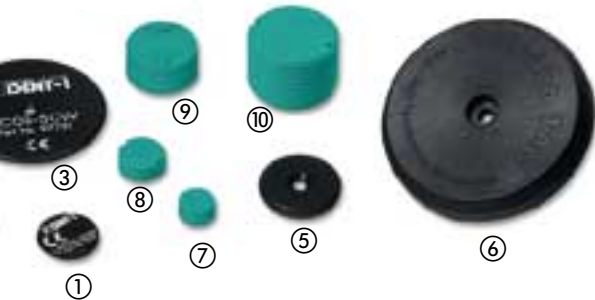
Data carriers for the hazardous areas in the 30GK housing (Fig. 10) on demand



CUSTOMER BENEFITS!

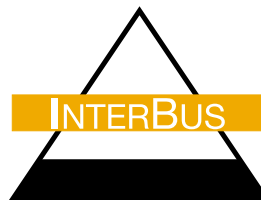
The new 125 kHz Ident-I System offers decisive benefits.

- Detection of standard commercially available 125 kHz transponders
- 2-line LC display with multi-function buttons
- 4 serial read/write heads to only one control unit
- Connection to current bus systems
- Minimal influence from metallic surroundings
- High read/write distances and short read/write cycles
- Removable terminals and narrow control cabinet versions for DIN rail mounting
- Field and control cabinet versions are available



	Order code	Description
Control units	IPI-KED2-4H	control unit with alphanumeric LC display and function buttons for up to 4 read/write heads
	U-KE-RX	serial interface unit (RS 232, RS 422, RS 485, TTY current loop).
	U-KE-B6	interface unit for bus connection of the control unit via PROFIBUS DB
	U-KE-B12	interface unit for bus connection of the control unit via Ethernet with TCP/IP protocol
Read heads	IPH-18GM-V1	Read/write head in M18 construction with a length of 60 mm
	IPH-30GM-V1	Read/write head in M30 construction with a length of 60 mm
	IPH-L2-V1	Read/write head in the VariKont L construction with dimensions (H x B x D in mm) 40 x 40 x 55
	IPT-FP	Read/write head with integrated control and interface in FP construction (H x B x D in mm) 80 x 80 x 65, can be plugged into various base sections for connection to various interfaces/fieldbus systems (see catalogue)
	IPT-HH9	Portable read/write device, incl. operating software

CONNECTIONS TO FIELD BUSES



This IDENT-I system can be connected to most higher-level bus systems, like PROFIBUS, Interbus, DeviceNet, Ethernet via TCP/IP protocol or via serial interfaces (RS 232/422/485/20 mA TTY current loops). There are, on the one hand, very many links to peripheral systems and on the other hand, the modular construction of the system offers the flexibility to adapt to changes in the higher-level system. The command structure is very similar for all the named bus systems and appropriate GSD (Gerätstammdaten = Master device data) and EDS files (Electronic data sheets) are available for simple configuration of the devices.



Serial

DeviceNet™

IDENT-M

SYSTEM V

The microwave identification system IDENT-M System V enables non-contact data transmission over large read/write distances, even in unfavourable environmental conditions. The large distances are required especially in the auto engineering field and logistics. In these areas, the microwave identification system, with its range of up to 2 m, combined with large storage capacities, offers the ideal solution. The microwave identification system is not adversely affected by cutting oils, dust, paint or dirt. Moreover, it is possible to transfer data through most types of plastic.

The use of microwaves with circular polarisation has the advantage that only minimal disruptive reflections develop through metals.

SYSTEM STRUCTURE

The microwave identification system comprises the following components: data carrier, read/write head with directional antenna and control unit. The antenna sends out its high frequency signal of 2.45 GHz. If the signal arrives at the data carrier, then it is modulated and reflected back to the antenna. The information is decoded in the control unit and passed on to the higher-level computer.

DATA CARRIERS

The data carriers essentially comprise the storage unit, the circuit for the wireless communication functions, and the battery. The latter has a service life of approx. 8 years or 30 million 64-byte read operations.



Type MVC-60-64K

Data carriers

Approval number A116624F

Protection class IP67

Type	Dimensions L x B x H	Memory capacity
MVC-60-64K	90 x 60 x 20	8 kByte
MVC-60B-64K*	90 x 60 x 20	8 kByte
MVC-60-256K	90 x 60 x 20	32 kByte

*with exchangeable battery

HANDHELD READ/WRITE DEVICE

The portable MVT-HH12 device enables you to read data locally and to modify data via the alphanumeric keypad.



Type MVT-HH12





Type MVH2000-F15

READ/WRITE HEAD

The read/write head contains the circuit for wireless communication with the data carrier and the link with the control unit. Data transmission at a rate of 76.8 kBaud between the data carrier and the read/write head enables 4 bytes to be transferred when the data carrier is moving at a speed of 100 km/h.



MICROWAVE IDENTIFICATION F57-COMplete SYSTEM AND CONNECTION TO THE CONTROL SYSTEM

The communication to higher-level control systems employs a standard TCP/IP protocol via Ethernet connection, which world-wide has proved to be the appropriate communication structure for the Internet. The system has server characteristics, which permit access by various client applications, i.e. the system can be operated flexibly from various workstations. Using the simple connection option to standard networks, data can be transferred as well as commands and parameter assignments via your existing control system.

Read/write heads

Approval number A116624F

Protection class IP65

Fixed connection 3 m cable; max. cable length 1200 m with cable extension (see table with connection cable data)

Operating temperature 253 Kelvin ... 343 Kelvin (-20 °C ... +70 °C)

Type	Dimensions LxBxH	Recommended operating distance	Operating distance max.
MVH500-F15	140 x 140 x 40	0 m ... 0.5 m	1.5 m
MVH2000-F15	140 x 140 x 40	0,2 m ... 2 m	4 m
MVT-HH12	140 x 140 x 40	0,2 m ... 2 m	4 m



Type MVK-5

Connection cable

Type	Cable length in m
MVK-5	5
MVK-10	10
MVK-20	20
MVK-30	30



Type MVG-KFD2-B6

BUS COUPLER

The bus coupler product range features a modular design for connecting the identification systems with common field buses. This is performed by connecting the bus coupler's serial interface with the control unit of the identification system, while the bus connection is linked with the field bus.

Bus coupler

Type	Width in mm	Bus interface
KHD2-MVI-AB2	40	Allen Bradley Remote I/O
MVG-KFD2-B5	40	INTERBUS
MVG-KFD2-B6	40	PROFIBUS DP

CONTROL UNIT

Two read/write heads can be connected to one control unit. The "intelligent" functions that have been implemented make the programming of the higher-level computer easier. Data security is provided by the use of test codes and the multiple reading, writing and comparison of the data. In addition to the RS 232 interface, the control unit also has an RS 422 interface which can be used to connect up

to 16 control units and thus up to 32 read/write heads to a bus system.



Type MVI-F57-2HB12



Type MVI-D2-2HRX

Control unit for two read/write heads

Type	Dimensions mm	Interfaces
MVI-D2-2HRX	140 x 61 x 80	RS232, RS422 addressable

IDENT-M

SYSTEM T

IDENT-M SYSTEM T

The microwave identification system operates in a frequency range from 2.435 to 2.465 GHz. It is largely insensitive to disruptive environmental factors, and therefore offers a high degree of functional security. With read distances of up to 6 m, this system is especially well-suited to the automobile industry as well as logistics and access systems.

SYSTEM STRUCTURE

The microwave identification system IDENT-M System T consists of a read/write device and the code or data carriers. The read/write device communicates with the higher-level computer, e.g. PC or PLC via a serial interface (RS 232, RS 485), to ensure reliable communications.



Code and data carriers design C2

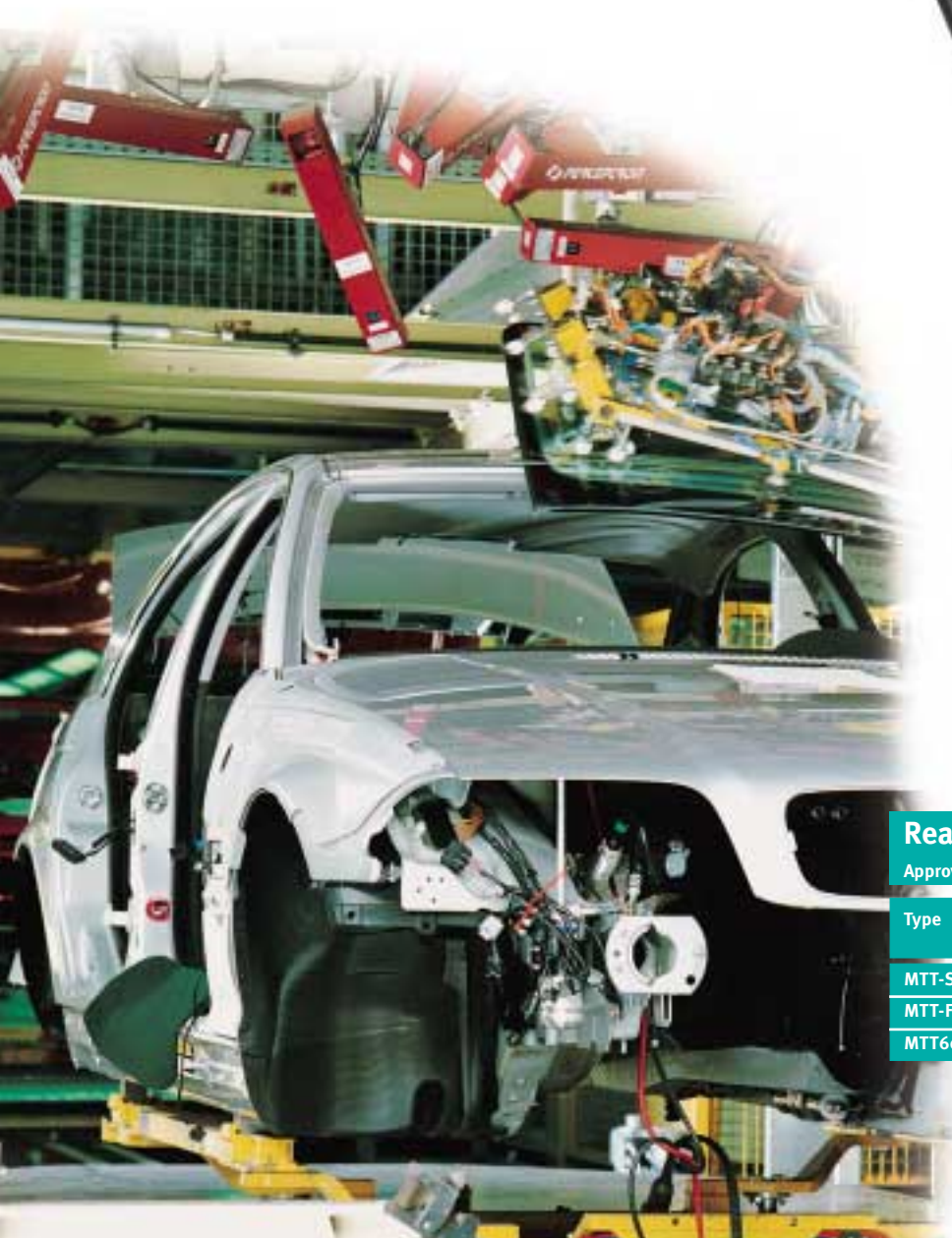
READ/WRITE DEVICE

The system supports a multi-tag capability, i.e. a number of code or data carriers are identified in the detection range. The read/write devices can be set to 100 different frequency channels, so that they do not interfere with one another. The read/write devices are equipped with digital inputs and outputs to enable them to be operated in stand-alone mode.

Read/write device

Approval number A131866J

Type	Dimensions in mm L x B x H	Protection class
MTT-S3	263 x 176 x 54	IP43
MTT-F52-S3	250 x 160 x 53	IP65
MTT6000-F51-S3	315 x 234 x 128	IP56





CODE AND DATA CARRIER

The system includes code and data carriers, with a unique, eight-digit decimal number stored on each. In addition, 574 bits of storage are available on the data carriers for user-specific data.

A high-temperature data carrier, which can easily withstand temperature cycles up to 200 °C, has been designed specifically for paint shops in the automobile industry.

Data carrier

Approval number A131866J, memory capacity 574 data bits, protection class IP67

Type	Dimensions mm L x B x H	Read/write distances (m) with read/write device			
		MTT-S3, MTT-F52-S3		MTT6000-F51-S3	
		Read distance	Write distance	Read distance	Write distance
MTM-C1	86 x 54 x 3	4.0	0.5	6.0	0.5
MTM-C2	86 x 54 x 8	4.0	0.5	6.0	0.5

Code carrier

Approval number A131866J, protection class IP67

Type	Dimensions mm L x B x H	MTT-S1, MTT-F52-S3		MTT6000-F51-S3	
		Read distance	Write distance	Read distance	Write distance
MTO-C1	86 x 54 x 3	3.3	–	5.0	–
MTO-C2	86 x 54 x 8	3.3	–	5.0	–

Code and data carriers design C1



Type MTT-S3



Read/write devices



Type MTT6000-F51-S3

IDENTIFICATION

SYSTEMS SERVICES

IDENT PROJECT GROUP

Are you looking for support in the integration of our identification systems into your material-flow, production-control or logistic applications?

Are you interested in an integrated solution?

Our "Ident" project group can provide the support you require. In each of the project phases you can select from options ranging from a one-off consultation to main contractor status. Listed below are just a few of the companies with which we have successfully worked in this way in the past:

- BMW (Dingolfing, D)
- BMW (Regensburg, D)
- BMW (Spartanbourg, USA)
- BMW (Oxford, GB)
- Bus station (Fribourg, CH)
- Airport (Genève, CH)
- GM Powertrain (Warren, USA)
- Landrover (Solihull, GB)
- Porsche (Stuttgart, D)



FURTHER TRAINING – APPLICATION ORIENTED IDENTIFICATION SYSTEMS SEMINAR

This seminar is aimed at people working in the fields of mechanical engineering, electrical engineering, precision engineering, chemical engineering and control systems. Within these fields, the seminar is designed for people who are involved with planning, production, operation and maintenance of automated plants, as well as people involved with trade and industry that are working with automated production and commissioning facilities. Other relevant groups include trainers and teachers from the mechanical and electronics

industries, as well as specialist dealers. Within the framework of this seminar, the functional principles of the systems in use are introduced, and their characteristics are examined. Example applications are used to help convey the necessary knowledge for choosing and setting up identification systems. Exercises are used to consolidate the knowledge that has been gained, and the documentation that accompanies the course can be taken away and be used as a refresher.

STARTERKITS

Don't just look and read, try it yourself – three different starter kits make this possible. A kit contains a complete identification system with mains supply, PC connection cable and the IDENT 2005 demo program.



DEMO PROGRAM

IDENT 2005



This program can be run under Windows 95/98 and Windows NT, and features extensive on-line help. Installation is straightforward, and the identification system connected is detected automatically. All the important commands can be input through the command window and executed using this program. The interface monitor logs the entire communication.



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