



IDM

Mobile 1D and 2D code identification for standard and industrial applications

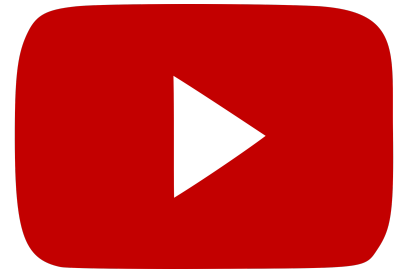
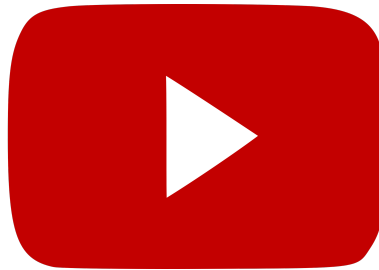
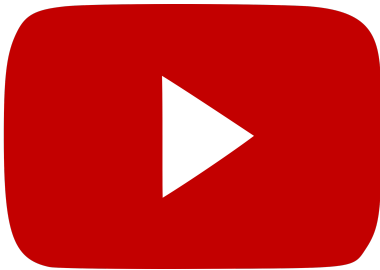
SICK
Sensor Intelligence.

Advantages



The battery-free solution for everyday use

The UltraCap™ supercapacitor serves as a battery-free voltage supply and is compatible with all IDM cable-free mobile handheld scanners. It is characterized by its long service life and thereby lowers the operating costs of the mobile handheld scanner. At the same time, it produces less electronic waste than battery-operated devices. UltraCap™ is not a hazardous good and is therefore unproblematic to send. Moreover, the supercapacitor is easy to replace. It is also possible to retrofit battery-operated solutions with the UltraCap™.



Quickly deployable

Only 50 minutes charging time until fully charged. Short-term availability thanks to one-minute fast charge (up to 700 scans).

Ecological and economical

UltraCap™ is more cost-effective and easy to send than conventional lithium-ion batteries.

Durable and sustainable

Lasts 25 times longer than conventional lithium-ion batteries. That reduces electronic waste and helps save valuable raw materials.



Mobile handheld scanners with battery-free power supply: The UltraCap™ supercapacitor is quickly charged and ensures less electronic waste. This enables a mobile handheld scanner to be operated for longer and at lower costs.

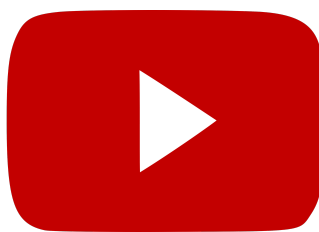


SICK mobile handheld scanners – a good way to make your connection

Using modular connection technology, the mobile handheld scanners from SICK can be integrated into numerous fieldbus technologies such as PROFIBUS DP, PROFINET IO/RT, Ethernet TCP/IP, or EtherCAT®. When used in systems with fixed 1D and 2D cameras or RFID read/write devices, the AUX loop-in is an economical solution.



Especially when it comes to stationary track and trace systems, manual mobile code reading is often required as a backup. This can be done economically with AUX loop-in.



This video tutorial gives an example of the materials and steps required for integration in a fieldbus network.



Simple PROFIBUS integration into large track and trace systems is possible using the Connection Device Fieldbus fieldbus module.



Simple integration into numerous fieldbus technologies and AUX loop-in for track and trace systems using modular connection technology



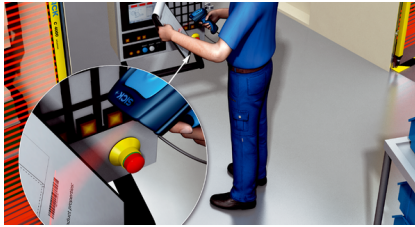
For industrial applications: Tangible benefits to increase your flexibility

The industrial variants of the IDM mobile handheld scanners safely and reliably detect 1D and 2D codes as well as all common stacked codes such as PDF417. Rugged housing with IP65 enclosure rating enables the mobile handheld scanner to withstand adverse ambient conditions. At the same time, however, it is light, easy to hold, and can be used simply and intuitively.

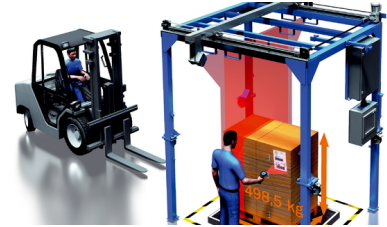
ly due to its triple read feedback via LED, beeper, and vibration. The wireless variants deliver flexibility and mobility. The combination of reliable code reading, rugged design, and SICK connectivity enables use in an extremely wide range of industrial fields of application.



Tire identification in factory automation: Highly reliable thanks to IP65 industrial enclosure rating and rugged housing.



Data collection in production: Traceability of products and processes through reliable code identification.



Mobile volume detection of piece goods and pallets. The code is detected by the hand-held scanner and the volume measurement is started.



Compact, very rugged, and shock resistant for harsh and demanding day-to-day work in industrial environments



For standard applications: Reliable code reading has never been easier

The standard variants of the IDM mobile handheld scanners safely and reliably detect 1D and 2D codes as well as all common stacked codes such as PDF417. Thanks to its light and ergonomic design, the scanner is easy to hold and comfortable to use.

Fast and reliable identification of 1D and 2D codes, an ergonomic design, and simple operation make the scanner ideal for daily use in a very wide range of less harsh applications.



Correct identification of sample bar codes in clinical analysis without manual data entry. A single device for different codes.



Mobile identification of placement material. Fast code identification in any orientation thanks to integrated matrix camera.



The mobile handheld scanner is suitable for reading 1D, 2D, and stacked codes during the collection of consignments.



Cost-effective: Fast and reliable identification of 1D and 2D codes for daily use in a very wide range of less harsh applications



Technical data overview

Application	Standard application, Industrial application (depending on type)
Readable code structures	1D codes, Stacked, 2D codes (depending on type)
Code resolution	0.076 mm ... 0.1 mm $\geq 0.07 \text{ mm}^{1)}$ $\geq 0.13 \text{ mm}^{2)}$
Reading distance	0 mm ... 850 mm ³⁾ 20 mm ... 850 mm
Sensor	1,280 px x 800 px
Ambient operating temperature	-20 °C ... +50 °C (depending on type)
Enclosure rating	IP41 IP52 IP65 IP42 (depending on type)
Shock resistance	25 drops from 1.5 m height on concrete 25 drops from 1.8 m height on concrete 50 drops from 2 m height on concrete
Ethernet	✓, TCP/IP, Optional, over external connection module / ✓, Optional, over external connection module (depending on type)
PROFINET	✓, optional over external fieldbus module / ✓ (depending on type)
EtherCAT	✓, optional over external fieldbus module
Serial	✓ / RS-232 TTL / ✓ / RS-232 (depending on type)
PROFIBUS DP	✓, optional over external fieldbus module
USB	✓
PS/2	✓
Bluetooth	✓

¹⁾ Valid for Code 39.

²⁾ Valid for Data Matrix code.

³⁾ For details see reading field diagram.

Product description

The IDM mobile handheld scanners reliably detect 1D, 2D and stacked codes such as PDF417. Various types with an IP65 enclosure rating and with or without cables are available: The devices meet both the simple and demanding requirements of industrial applications and are suitable for a variety of fields of application and ambient conditions. Thanks to their low weight, light and ergonomic shape, and read confirmation, the mobile handheld scanners are easy to operate. SICK also offers battery-free, durable wireless variants with a quickly rechargeable supercapacitor. SICK has suitable connection modules for integrating the devices into industrial fieldbuses.

At a glance

- Reliable identification of common 1D and 2D codes (including PDF417)
- Rugged housing
- Integration into industrial fieldbuses using SICK connection technology
- Good read confirmation via LED, beeper and vibration
- Wireless variants with UltraCap™: durable, quickly charged and easy to ship (no hazardous goods transport required)

Your benefits

- Quick and accurate identification even of poorly printed bar codes eliminates the need to enter data manually
- Highly reliable thanks to the rugged housing with an enclosure rating of IP65
- Easy focusing of barcodes using a clearly visible aiming aid
- Simple and flexible integration into industrial fieldbus networks using SICK connection technology
- Simple and intuitive operation through multiple read confirmation
- Easy configuration: Either by scanning a single barcode or using intuitive software
- Easy replacement of conventional batteries with an UltraCap™ supercapacitor

Fields of application

- Production control and traceability of products and components in the automotive, electronics, solar and consumer goods industries
- Warehouses and distribution centers, e.g., incoming goods, order picking, and dispatch

Ordering information

Other models and accessories → www.sick.com/IDM

- **Readable code structures:** 1D codes
- **Reading distance:** 0 mm ... 400 mm (For details see reading field diagram.)
- **Code resolution:** 0.1 mm
- **Scanner design:** Cable connection variant
- **Application:** Standard application
- **Note:** Additional accessories may be necessary for some communication interfaces (details available online)
- **Ambient operating temperature:** -10 °C ... +50 °C

Communication interface	Type	Part no.
Ethernet, PROFINET, EtherCAT [®] , Serial, PROFIBUS DP, USB, PS/2	IDM12x-301B	6050059
USB	IDM120-3 USB Kit	6050056

- **Readable code structures:** 1D codes
- **Reading distance:** 20 mm ... 850 mm (For details see reading field diagram.)
- **Code resolution:** ≥ 0.076 mm
- **Note:** Additional accessories may be necessary for some communication interfaces (details available online)

Scanner design	Application	Communication interface	Ambient operating temperature	Type	Part no.
Cable connection variant	Industrial application	Ethernet, PROFINET, EtherCAT [®] , Serial, PROFIBUS DP	-10 °C ... +50 °C	IDM160-300S RS-232 Kit	6054546
				IDM160-300S RS-232 Power Kit	1070949
		Ethernet, PROFINET, EtherCAT [®] , Serial, PROFIBUS DP, USB, PS/2	-10 °C ... +50 °C	IDM160-300S	6054544
				USB	-10 °C ... +50 °C
	Standard application	Ethernet, PROFINET, EtherCAT [®] , Serial, PROFIBUS DP	-10 °C ... +50 °C	IDM140-300S RS-232 Kit	6054540
				IDM140-300S RS-232 Power Kit	1070948
		Ethernet, PROFINET, EtherCAT [®] , Serial, PROFIBUS DP, USB, PS/2	-10 °C ... +50 °C	IDM140-300S	6054538
				USB	-10 °C ... +50 °C

Scanner design	Application	Communication interface	Ambient operating temperature	Type	Part no.
Wireless variant	Industrial application	Ethernet, PROFINET, EtherCAT [®] , Serial, PROFIBUS DP, Bluetooth	-20 °C ... +50 °C	IDM161-300S RS-232 Kit	6054558
		Ethernet, PROFINET, EtherCAT [®] , Serial, PROFIBUS DP, USB, PS/2, Bluetooth	-20 °C ... +50 °C	IDM161-300S	6054556
		USB	-20 °C ... +50 °C	IDM161-300S USB Kit	6054557
	Standard application	Ethernet, PROFINET, EtherCAT [®] , Serial, PROFIBUS DP, Bluetooth	-10 °C ... +50 °C	IDM141-300S RS-232 Kit	6054552
		Ethernet, PROFINET, EtherCAT [®] , Serial, PROFIBUS DP, USB, PS/2, Bluetooth	-10 °C ... +50 °C	IDM141-300S	6054550
		USB	-10 °C ... +50 °C	IDM141-300S USB Kit	6054551

- **Readable code structures:** 1D codes, Stacked
- **Reading distance:** 20 mm ... 850 mm (For details see reading field diagram.)
- **Code resolution:** ≥ 0.076 mm
- **Note:** Additional accessories may be necessary for some communication interfaces (details available online)

Scanner design	Application	Communication interface	Ambient operating temperature	Type	Part no.
Cable connection variant	Industrial application	Ethernet, PROFINET, EtherCAT [®] , Serial, PROFIBUS DP, USB, PS/2	-10 °C ... +50 °C	IDM160-310S	6054547
	Standard application	EtherCAT [®] , Serial, PROFIBUS DP, USB, PS/2	-10 °C ... +50 °C	IDM140-310S	6054541
Wireless variant	Industrial application	Ethernet, PROFINET, EtherCAT [®] , Serial, PROFIBUS DP, USB, PS/2, Bluetooth	-20 °C ... +50 °C	IDM161-310S	6054559
				IDM161-310S Basic Kit	6054793
	Standard application	-10 °C ... +50 °C	IDM141-310S	6054553	

- **Readable code structures:** 1D codes, Stacked
- **Reading distance:** 20 mm ... 850 mm
- **Code resolution:** ≥ 0.076 mm
- **Note:** Additional accessories may be necessary for some communication interfaces (details available online)

Scanner design	Application	Communication interface	Ambient operating temperature	Type	Part no.
Cable connection variant	Industrial application	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP	-10 °C ... +50 °C	IDM160-411S RS232 Kit	6080734
		Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, USB	-10 °C ... +50 °C	IDM160-411S	6080732
		USB	-10 °C ... +50 °C	IDM160-411S USB Kit	6080733
	Standard application	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP	-10 °C ... +50 °C	IDM140-411S RS232 Kit	6080731
		Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, USB	-10 °C ... +50 °C	IDM140-411S	6080729
		USB	-10 °C ... +50 °C	IDM140-411S USB Kit	6080730
Wireless variant	Industrial application	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, Bluetooth	-20 °C ... +50 °C	IDM161-411S RS232 Kit	6080747
		Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, USB, Bluetooth	-20 °C ... +50 °C	IDM161-411S	6080745
				IDM161E-411S	6086914
				IDM161E-411S RS232 Kit	1144319
				IDM161E-411S USB Kit	1144318
		USB	-20 °C ... +50 °C	IDM161-411S USB Kit	6080746
	Standard application	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, Bluetooth	-10 °C ... +50 °C	IDM141-411S RS232 Kit	6080744
		Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, USB, Bluetooth	-10 °C ... +50 °C	IDM141-411S	6080742
				IDM141E-411S	6086913
				IDM141E-411S RS232 Kit	1144325
				IDM141E-411S USB Kit	1144324
		USB	-10 °C ... +50 °C	IDM141-411S USB Kit	6080743

- **Readable code structures:** 1D codes, 2D codes, Stacked
- **Reading distance:** 30 mm ... 400 mm
- **Code resolution:** ≥ 0.07 mm (Valid for Code 39.), ≥ 0.13 mm (Valid for Data Matrix code.)
- **Note:** Additional accessories may be necessary for some communication interfaces (details available online)

Scanner design	Application	Communication interface	Ambient operating temperature	Type	Part no.	
Cable connection variant	Industrial application	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP	-20 °C ... +50 °C	IDM260-311S RS-232 Kit	6068394	
				IDM260-411S RS232 Kit	6080741	
		Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, USB	-20 °C ... +50 °C	IDM260-311S	6068392	
				IDM260-411S	6080738	
		USB	-20 °C ... +50 °C	IDM260-311S USB Kit	6068393	
				IDM260-411S USB Kit	6080740	
	Standard application	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP	-10 °C ... +50 °C	IDM240-311S RS-232 Kit	6068391	
				IDM240-411S RS232 Kit	6080737	
		Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, USB	-10 °C ... +50 °C	IDM240-311S	6068389	
				IDM240-411S	6080735	
		USB	-10 °C ... +50 °C	IDM240-311S USB Kit	6068390	
				IDM240-411S USB Kit	6080736	
Wireless variant	Industrial application	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, Bluetooth	-20 °C ... +50 °C	IDM261-311S RS-232 Kit	6068402	
				IDM261-411S RS232 Kit	6080753	
		Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, USB, Bluetooth	-20 °C ... +50 °C	IDM261-311S	6068400	
				IDM261-411S	6080751	
				IDM261E-411S	6086916	
				IDM261E-411S RS232 Kit	1144316	
		USB	-20 °C ... +50 °C	IDM261-311S USB Kit	6068401	
				IDM261-411S USB Kit	6080752	
		Standard application	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, Bluetooth	-10 °C ... +50 °C	IDM241-311S RS-232 Kit	6068398
					IDM241-411S RS232 Kit	6080750
	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, USB, Bluetooth		-10 °C ... +50 °C	IDM241-311S	6068396	
				IDM241-411S	6080748	
				IDM241E-411S	6086915	
				IDM241E-411S RS232 Kit	1144322	
	USB		-10 °C ... +50 °C	IDM241E-411S USB Kit	1144321	
				IDM241-311S USB Kit	6068397	
	IDM241-411S USB Kit		6080749			

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com