



## Zx36

Mobile 1D, 2D and DPM code identification for demanding industrial applications

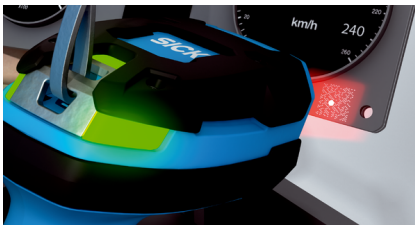
**SICK**  
Sensor Intelligence.

## Advantages



### Reliable code identification for demanding industrial applications

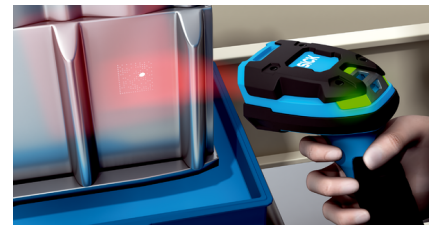
The Zx36 variants capture any code, whether 1D, 2D or DPM. The size of the code, surface, contrast or density play almost no role. The SR variant detect barcodes on labels under virtually any condition – including labels that are damaged, dirty, printed in poor quality or shrink-wrapped under foil. The DPM variants are extremely well-suited for demanding marks such as needle embossing, laser etching, inkjet, chemical etching, inkjet casting, impressions and thermal coatings. This means Zx36 scanners can be used universally, as mobile handheld scanners on the production line for comprehensive material tracking as well as in the warehouse from goods receipt to shipping.



Thanks to intelligent decoding algorithms and a high-resolution camera, the ZS36x8 SR is suitable for identifying small, lasered codes.



Due to the smart decoding algorithms and its intense direct light line, the ZI36x8 SR detects even distant, low-contrast codes without any problems.



The integrated diffuser provides indirect light and easily detects marks even on highly reflective surfaces. The ZS36x8 DPM diffuser also perfectly illuminates the barcode edges, thus simplifying decoding.



**Impressive scanning performance for DPM and classic 1D and 2D codes, even with small code sizes, weak contrasts and different surfaces.**



## Extremely rugged and durable design

The Zx36 device variants are the most rugged mobile handheld scanners from SICK to date. They can withstand drops onto concrete from a height of 3 m, making them sturdier than many other mobile handheld scanners in this class. Even after multiple drops from manned forklift trucks onto concrete, the Zx36 scanners continue to function flawlessly. Even dust and dirt in warehouses or rain and snow in outdoor areas cannot harm them.



### Protected from external influences

Zx36 scanners are dust-proof, splash-proof and waterproof in accordance with IP65 and IP68.



### Nearly indestructible

Zx36 scanners can withstand multiple drops onto concrete from a height of 3 m or 7,500 rollovers from a drop height of 1 m.



### For either in- or outdoors

Zx36 scanners are resistant to extreme heat, cold, and humidity.

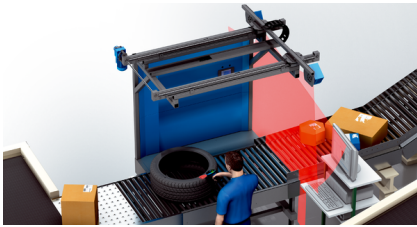


**Thanks to their rugged design, the Zx36 variants operate reliably even under demanding ambient conditions and deliver optimum reading results.**

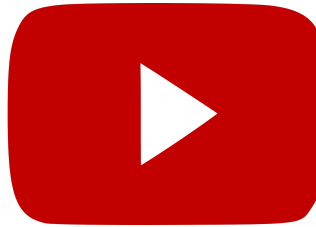


## SICK mobile handheld scanners – a good way to make your connection

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**



## Technical data overview

<b>Application</b>	Industrial application
<b>Readable code structures</b>	1D codes, 2D codes, Stacked, Digimarc®, direct-marked codes (depending on type)
<b>Code resolution</b>	≥ 0.08 mm <sup>1)</sup> ≥ 0.13 mm <sup>2)</sup> ≥ 0.13 mm <sup>3)</sup>
<b>Reading distance</b>	0 mm ... 1,520 mm (depending on type)
<b>Sensor</b>	1,280 px x 960 px
<b>Ambient operating temperature</b>	-30 °C ... +50 °C (depending on type)
<b>Enclosure rating</b>	IP65, IP68
<b>Shock resistance</b>	Multiple falls Onto concrete from a height of 3 m Multiple falls onto concrete from a height of 2.4 m
<b>Ethernet</b>	✓, TCP/IP, optional over external fieldbus module
<b>PROFINET</b>	✓, optional over external fieldbus module
<b>EtherCAT</b>	✓, optional over external fieldbus module
<b>Serial</b>	✓, RS-232 TTL
<b>PROFIBUS DP</b>	✓, optional over external fieldbus module
<b>USB</b>	✓
<b>Bluetooth</b>	✓

<sup>1)</sup> Valid for Code 39.

<sup>2)</sup> Valid for Code 128.

<sup>3)</sup> Valid for Data Matrix code.

## Product description

The Zx36 mobile handheld scanners detect a large number of codes, including 1D, 2D and DPM codes. The rugged housing with an enclosure rating of IP65 or IP68 enables the mobile handheld scanners to withstand adverse ambient conditions. Thanks to the three-fold read confirmation via LED, beeper and vibration, the devices can be quickly and intuitively configured and operated. Corded and cordless variants ensure the Zx36 can be flexibly adapted to countless applications. SICK offers suitable connection modules for integration into industrial fieldbuses such as PROFIBUS, PROFINET and Ethernet TCP/IP. Thanks to the combination of reliable code reading, rugged design, and easy fieldbus configuration, the Zx36 is also suitable for very demanding industrial applications.

## At a glance

- Reads 1D, 2D and DPM codes
- Rugged: Survives falls from a height of 3 m and 7,500 impacts from a drop height of 1 m
- Industrial grade: Available with an enclosure rating of IP65 or IP68, suitable for use down to -30 °C
- Easy configuration: By scanning a single barcode, using intuitive software or – during maintenance – by automatic data upload

## Your benefits

- Using intelligent decoding algorithms, detects codes regardless of their size, resolution, surface and their contrast
- Able to detect codes on a variety of surfaces, e.g., reflective, irregular and curved, due to the intelligent illumination system
- DPM device variants for identifying demanding DPM codes applied, for example, by dot peening, laser marking, chemical etching or thermal coating
- Highly reliable thanks to the rugged industrial housing with an enclosure rating of IP65 or IP68
- Easy to integrate into industrial fieldbuses such as PROFIBUS, PROFINET, Ethernet TCP/IP, EtherCAT® using connection modules from SICK

## Fields of application

- Factory automation: Reads dot-peened or lasered DPM codes even on metal and plastic
- Electronics industry: Detection of printed, etched or thermally-coated DPM codes on electronic components
- Logistics: Identification of 1D and 2D codes, e.g., in track and trace applications in intralogistics

## Ordering information

Other models and accessories → [www.sick.com/Zx36](http://www.sick.com/Zx36)

- **Readable code structures:** 1D codes
- **Reading distance:** 0 mm ... 1,067 mm
- **Code resolution:** ≥ 0.102 mm (Valid for Code 39.)
- **Application:** Industrial application
- **Note:** Additional accessories may be necessary for some communication interfaces (details available online)

Scanner design	Communication interface	Ambient operating temperature	Country approval	Type	Part no.
Cable connection variant	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, USB	-30 °C ... +50 °C	Korea, India	ZI3608-SR00263VZK	6080548
			World-wide (except India, Korea)	ZI3608-SR00263VZWW	6080546
Wireless variant	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, USB, Bluetooth	-20 °C ... +50 °C	Korea, India	ZI3678-SR0F263VZK	6080549
			World-wide (except India, Korea)	ZI3678-SR0F263VZWW	6080547

- **Readable code structures:** 1D codes, 2D codes, Stacked, Digimarc®
- **Reading distance:** 30 mm ... 1,520 mm
- **Code resolution:** ≥ 0.13 mm (Valid for Code 128.), ≥ 0.19 mm (Valid for Data Matrix code.)
- **Application:** Industrial application
- **Note:** Additional accessories may be necessary for some communication interfaces (details available online)

Scanner design	Communication interface	Ambient operating temperature	Country approval	Type	Part no.
Cable connection variant	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, USB	-30 °C ... +50 °C	Korea, India	ZS3608-SR20263VZK	6080544
			World-wide (except India, Korea)	ZS3608-SR20263VZWW	6080542
Wireless variant	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, USB, Bluetooth	-20 °C ... +50 °C	Korea, India	ZS3678-SR2F263VZK	6080545
			World-wide (except India, Korea)	ZS3678-SR2F263VZWW	6080543

- **Readable code structures:** 1D codes, 2D codes, Stacked, direct-marked codes
- **Reading distance:** 3 mm ... 125 mm
- **Code resolution:** ≥ 0.08 mm (Valid for Code 39.), ≥ 0.13 mm (Valid for Data Matrix code.)
- **Application:** Industrial application
- **Note:** Additional accessories may be necessary for some communication interfaces (details available online)

Scanner design	Communication interface	Ambient operating temperature	Country approval	Type	Part no.
Cable connection variant	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, USB	-30 °C ... +50 °C	India, Korea	ZS3608-DPA0262VZK	6073736
			World-wide (except India, Korea)	ZS3608-DPA0262VZWW	6073730
Wireless variant	Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, USB, Bluetooth	-20 °C ... +50 °C	India, Korea	ZS3678-DPAF262VZK	6073738
			World-wide (except India, Korea)	ZS3678-DPAF262VZWW	6073732

- **Readable code structures:** 1D codes, 2D codes, Stacked, direct-marked codes
- **Reading distance:** 0 mm ... 86 mm
- **Code resolution:** ≥ 0.08 mm (Valid for Code 39.),, ≥ 0.13 mm (Valid for Data Matrix code.)
- **Application:** Industrial application
- **Note:** Additional accessories may be necessary for some communication interfaces (details available online)

Scanner design	Communication interface	Ambient operating temperature	Country approval	Type	Part no.
Cable connection variant	Ethernet, PROFINET, EtherCAT <sup>®</sup> , Serial, PROFIBUS DP, USB	-30 °C ... +50 °C	India, Korea	ZS3608-DP20263VZK	6073737
			World-wide (except India, Korea)	ZS3608-DP20263VZWW	6073731
Wireless variant	Ethernet, PROFINET, EtherCAT <sup>®</sup> , Serial, PROFIBUS DP, USB, Bluetooth	-20 °C ... +50 °C	India, Korea	ZS3678-DP2F263VZK	6073739
			World-wide (except India, Korea)	ZS3678-DP2F263VZWW	6073733

## 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](http://www.sick.com)