# ZS36x8 DPM

Reliable DPM code identification for challenging industrial applications
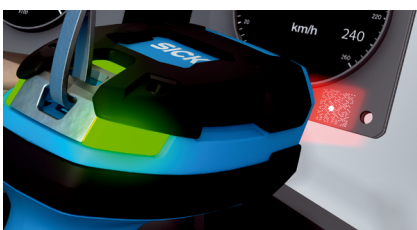
**MOBILE HAND-HELD SCANNERS**

**SICK**
Sensor Intelligence.

## Advantages



## Reliable DPM code identification for challenging industrial applications
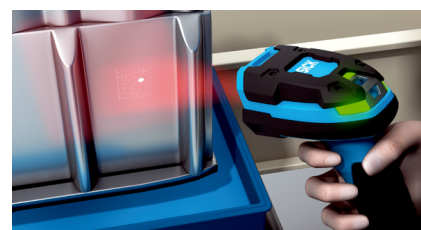
The ZS36x8 DPM mobile hand-held scanner very quickly detects any code, whether 1D, 2D or DPM code. Size of the code, surface, contrast or density play almost no role. The ZS36x8 DPM also masters demanding marks such as needle embossing, laser etching, inkjet, chemical etching, inkjet casting, impressions and thermal coatings. But the same mobile hand-held scanner can also capture bar codes on labels under virtually any condition – including labels that are damaged, dirty, printed in poor quality or shrink-wrapped. That means the ZS36x8 DPM can be used absolutely anywhere: you get a mobile hand-held scanner that you can use on the production line for comprehensive tracking of materials and in the warehouse from goods receiving to shipping.



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

Due to the smart illumination system with the red light of the integrated diffuser or bright direct light, the ZS36x8 DPM detects even low-contrast codes effortlessly.

The integrated diffuser provides indirect light and easily detects marks on highly reflective surfaces. In addition, the diffuser perfectly illuminates the bar code edges, thus simplifying decoding.

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

# Extremely rugged and durable design

**The ZS36x8 DPM is the most reliable of all mobile hand-held scanners from SICK to date. It can withstand drops onto concrete from a height of 2.4 m – that's 23% more rugged than many other mobile hand-held scanners in this class. Even after multiple drops from manned forklift trucks onto concrete, the ZS36x8 DPM identifies codes without error. Even dust and dirt in warehouses or rain and snow in outdoor areas cannot harm it.**



Always tight – the ZS36x8 DPM is dust-proof, splash-proof and waterproof in accordance with IP65 and IP67.



Virtually indestructible – it survives multiple drops onto concrete from a height of 2.4 m or 5,000 rollovers from a height of 1 m.



Whether indoor or outdoor, the ZS36x8 DPM withstands extreme heat, cold and humidity.
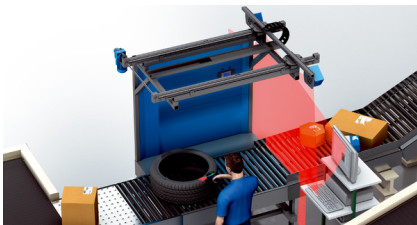
**Thanks to its extremely rugged design, the ZS36x8 DPM operates reliably even under demanding ambient conditions and delivers optimum reading results.**

## SICK mobile hand-held scanners – the best way to make your connection

**Modular connectivity enables integration into many fieldbus technologies: PROFIBUS DP, PROFINET IO, Ethernet TCP/IP, EtherCAT®, DeviceNet™. For use in systems such as fixed 1D bar code scanners, 2D cameras, and RFID reading devices, the AUX connectivity offers a cost-effective solution.**







Especially when it comes to stationary track and trace systems, manual mobile code reading is often required as a back-up – 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.

Easy PROFIBUS integration into large track-and-trace systems with the CDF600 fieldbus module.

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

## Technical data overview

| | |
|---|---|
| **Application** | Industrial |
| **Readable code structures** | 1D codes, 2D codes, Stacked, direct-marked codes |
| **Code resolution** | ≥ 0.08 mm [1]<br>≥ 0.13 mm [2] |
| **Reading distance** | 0 mm ... 125 mm  (depending on type) |
| **Sensor** | 1,280 px x 960 px |
| **Ambient operating temperature** | −30 °C ... +50 °C  (depending on type) |
| **Enclosure rating** | IP65, IP67 |
| **Shock resistance** | Multiple falls onto concrete from a height of 2.4 m |
| **Ethernet** | ✓, TCP/IP, optional over external fieldbus module |
| **PROFINET** | ✓, optional over external fieldbus module |
| **EtherCAT** | ✓, optional over external fieldbus module |
| **Serial** | ✓, RS-232 TTL |
| **PROFIBUS DP** | ✓, optional over external fieldbus module |
| **DeviceNet™** | ✓, Optional, over external connection module |
| **USB** | ✓ |
| **Bluetooth** | ✓ |

[1] Valid for Code 39.

[2] Valid for Data Matrix code.

## Product description

The ZS36x8 DPM mobile hand-held scanner very quickly detects all direct partial markings (DPM) and 1D- and 2D codes. The rugged housing with IP65 and IP67 enclosure rating enables the mobile hand-held scanner to withstand adverse ambient conditions. Thanks to the three-fold read confirmation via LED, beeper and vibration, it can be quickly and intuitively configured and operated. Corded and cordless variants ensure that the ZS36x8 DPM can be adjusted flexibly to countless applications. SICK offers the right connection modules for integration into industrial fieldbuses such as PROFIBUS, PROFINET and Ethernet TCP/IP. Thanks to the combination of reliable DPM code reading, rugged design, and easy fieldbus configuration, the ZS36x8 DPM can be used in a wide range of industrial applications.

## At a glance

- Reading of 1D, 2D, and DPM codes
- Special illumination: Direct white light; indirect, diffuse red light
- Very rugged: Survives falls from 2.4 m height and 5,000 rollovers at 1 m drop height each
- Interfaces: USB, RS-232 for integration into PROFIBUS, PROFINET, Ethernet TCP/IP, EtherCAT® industrial fieldbuses

## Your benefits

- Detection of challenging DPM codes regardless of code size, surface, contrast and resolution, including very challenging marks such as needle marks, laser etching, ink-jet printing, chemical etching, ink-jet molding and thermal coating
- Detection of codes on all surfaces, e.g. reflective, irregular and curved, due to the clever illumination system
- Fast and correct reading even on poorly printed 1D and 2D codes
- Highly reliable thanks to rugged industrial housing with enclosure rating IP65 and IP67
- Can be easily integrated into different industrial fieldbuses with connection modules from SICK

## Fields of application

- Automotive industry: Reading of needled or lasered DPM codes, 1D and 2D codes
- Identification of etched DPM codes on glossy surfaces, e.g. devices, gear wheels, rings
- Detection of printed or thermally-coated DPM codes on glossy printed circuit boards and other electronic components

## Ordering information

Other models and accessories ➔ www.sick.com/ZS36x8_DPM

- **Sub product family:** ZS3608-DPA Corded
- **Version:** Standard Density
- **Items supplied:** Single scanner
- **Codes/data cards:** 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.)
- **Communication interface:** Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, DeviceNet™, USB

| Type | Part no. |
|---|---|
| ZS3608-DPA0262VZK | 6073736 |
| ZS3608-DPA0262VZWW | 6073730 |

- **Sub product family:** ZS3678-DPA Cordless
- **Version:** Standard Density
- **Items supplied:** Single scanner
- **Codes/data cards:** 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.)
- **Communication interface:** Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, DeviceNet™, USB, Bluetooth

| Type | Part no. |
|---|---|
| ZS3678-DPAF262VZK | 6073738 |
| ZS3678-DPAF262VZWW | 6073732 |

- **Sub product family:** ZS3608-DP Corded
- **Version:** High Density
- **Items supplied:** Single scanner
- **Codes/data cards:** 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.)
- **Communication interface:** Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, DeviceNet™, USB

| Type | Part no. |
|---|---|
| ZS3608-DP20263VZK | 6073737 |
| ZS3608-DP20263VZWW | 6073731 |

- **Sub product family:** ZS3678-DP Cordless
- **Version:** High Density
- **Items supplied:** Single scanner
- **Codes/data cards:** 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.)
- **Communication interface:** Ethernet, PROFINET, EtherCAT®, Serial, PROFIBUS DP, DeviceNet™, USB, Bluetooth

| Type | Part no. |
|---|---|
| ZS3678-DP2F263VZK | 6073739 |
| 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**

SICK AG   |   Waldkirch   |   Germany   |   www.sick.com

**SICK**
Sensor Intelligence.