



Corded 1-D and 2-D Handheld Reader for Zone 1/21

IDM-Z1-x60-D-*

- Approved for Zone 1 and 21 (ATEX and IECEx)
- All 1-D standard barcode families supported
- 2-D model supports Data Matrix, QR, and other two-dimensional codes
- Fall tested from 2 m to ensure reliability

Corded 1-D and 2-D Handheld Reader for Zone 1/21



Function

IDM-Z1-x60-D-* corded handheld readers scan 1-D and 2-D codes in Zone 1/21 hazardous locations or safe areas. They are optimized for use with Pepperl+Fuchs VisuNet HMI components. 1-D models read all common one-dimensional barcode types, with an option available to read stacked codes. The 2-D model reads one-dimensional barcodes and stacked codes, as well as two-dimensional codes such as Data Matrix and QR codes. SK-IDM-Z1-*... supply modules enable stand-alone applications and data communication with the host PC or PLC in the safe area via RS-232/RS-422 or USB communication. A variety of cables are available as accessories for connectivity to VisuNet HMI components.

Technical Data

General specifications

| | |
|----------------|--|
| Type | scan frequency: 500 Hz (1-D models), 60 Hz (2-D model) |
| Light type | LED, visible red light (630 / 1310 nm) ambient light immunity 100 000 lx |
| Readable codes | barcode types: Code 39, Code 39 Trioptic, Code 32, Code 93, Code 11, Codabar, Code 128, GS1-128 / EAN 128, UPC / EAN / JAN (with addition), MSI/Plessey, UK/Plessey, IATA, Interleaved 2 of 5, Standard and Industrial 2 of 5, Matrix 2 of 5, Telepen, GS1 DataBar, Australian Post, China Post, German Post, US Planet, US Postnet, British Post, Intelligent Mail, Japan Post, Korean Post, Dutch KIX Post stacked code types (depending on model selected): PDF417, MicroPDF417, Code 49, Code 16K, Composite, Codablock F 2-D code types (depending on model selected): Data Matrix, QR, MicroQR, Aztec, Maxicode |
| Read distance | 20 ... 850 mm (1-D model) 30 ... 400 mm (2-D model) |
| Resolution | ca. ≥ 0.76 mm (1-D models) ca. ≥ 0.13 mm (2-D model) |

Indicators/operating means

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|------------|--|
| Indicators | 2 x LED (operating state) beeper/buzzer (can be switched off) |
|------------|--|

Interface

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|----------------|-------------------------|
| Interface type | RS-232, RS-422, and USB |
|----------------|-------------------------|

Directive conformity

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|-------------------------------|---|
| Electromagnetic compatibility | |
| Directive 2014/30/EU | EN 61000-6-2:2005 + AC:2005 , EN 61000-6-4:2007 + A1:2011 |
| Low voltage | EN 60950-1:2006+A1:2010+A2:2013+A11:2009+A12:2011 |
| RoHS | |
| Directive 2011/65/EU (RoHS) | EN 50581:2012 |

Ambient conditions













| | |
|-----------------------|-------------------------------|
| Operating temperature | -20 ... 50 °C (-4 ... 122 °F) |
|-----------------------|-------------------------------|

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Technical Data

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|--|---|
| Storage temperature | -30 ... 70 °C (-22 ... 158 °F) (1-D model) -40 ... 70 °C (-40 ... 158 °F) (2-D model) |
| Relative humidity | 95 % non-condensing |
| Impact resistance | 50 fall tests from 2 m height onto concrete |
| Mechanical specifications | |
| Degree of protection | IP65 |
| Mass | approx. 200 g without cable |
| Dimensions | 104 mm x 185 mm x 76 mm |
| Data for application in connection with hazardous areas | |
| EU-type examination certificate | IBExU 18ATEX1049 IECEX IBE 18.0008 |
| Marking | 1-D model: Ⓜ II 2G Ex ib IIC T4 Gb Ⓜ II 2D Ex ib IIC T135°C Db 2-D model: Ⓜ II 2G Ex ib op is IIB T4 Gb Ⓜ II 2D Ex ib op is IIC T135°C Db |
| Directive conformity | |
| Directive 2014/34/EU | EN 60079-0:2018 EN 60079-11:2012 EN 60079-28:2015 |
| General information | |
| Supplementary information | Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com . |

Accessories

| | | |
|---|----------------------------------|--|
|  | SCANNER-HOLDER-U1-XX00-N0 | Stainless steel holder for for IDM-Z1- handheld readers, compatible with AG-XX00 housing |
|  | CBL-IDMx60-D-J1-S-C38-N0 | Connection cable for IDM-Z1-x60-D-* corded Handheld Readers |
|  | CBL-IDMx6x-DB-J1-S-C60-N0 | Serial extension cable for IDM-Zx-* handheld barcode readers |
|  | CBL-IDMx6x-DB-J1-S-C30-N0 | Serial extension cable for IDM-Zx-* handheld barcode readers |
|  | CBL-IDMx6x-DB-J1-S-S60-N0 | Serial extension cable for IDM-Zx-* handheld barcode readers |
|  | CBL-IDMx6x-DB-J1-S-S30-N0 | Serial extension cable for IDM-Zx-* handheld barcode readers |
|  | CBL-IDM160-D-J1-U-S18-N0 | Connection cable for IDM-Z1-x60-D-* corded Handheld Readers |
|  | CBL-IDM160-D-J1-U-C38-N0 | Connection cable for IDM-Zx-x60-D-* corded Handheld Readers |
|  | SCANNER-HOLDER-U1-AG1-N0 | Stainless steel holder for for IDM-Z1- handheld readers, compatible with AG1 housing |
|  | CBL-IDMx60-D-J1-S-S18-N0 | Connection cable for IDM-Zx-x60-D-* corded Handheld Readers |
|  | DATL-IDM-DB-S-XX00-N0 | 1 m connector cable for corded handheld reader with M12 connector to open cable end |
|  | SK-IDM-Z1-x60-* | Power supply for IDM-Z1-* handheld readers and base station |

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Ordering information

| Model number | Description |
|----------------------------|---|
| IDM-Z1-160-D-1D-J1-SU-N-N0 | Corded, 1-D code reader Ex-protection: ATEX&IECEX Zone 1/21 Protocol: USB/Serial (depends on connection cable) NOTE: Connection cable not included. Please order separately! |
| IDM-Z1-160-D-1D-J1-SU-P-N0 | Corded, 1-D code reader Ex-protection: ATEX&IECEX Zone 1/21 Protocol: USB/Serial (depends on connection cable) Supports PDF417 Barcode NOTE: Connection cable not included. Please order separately! |
| IDM-Z1-260-D-2D-J1-S1-N-N0 | Corded, 2-D code reader Ex-protection: ATEX&IECEX Zone 1/21 Protocol: USB/Serial (depends on connection cable) NOTE: Connection cable not included. Please order separately! |