



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

IDM-Z1-x64-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-x64-D-* corded handheld readers scan 1-D and 2-D codes in Zone 1/21 explosion-hazardous areas or non-hazardous 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 codes and QR codes. SK-IDM-Z1-* supply modules enable stand-alone applications and data communication with the host PC or PLC in the non-explosion-hazardous area via RS-232/RS-422 or USB communication. Various 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	approx. ≥ 0.76 mm (1-D models) approx. ≥ 0.13 mm (2-D model)
Indicators/operating means	
Indicators	2 x LED (operating state) beeper/buzzer (can be switched off)
Interface	
Interface type	RS-232, RS-422, and USB
Directive conformity	
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)
Storage temperature	-30 ... 70 °C (-22 ... 158 °F) (1-D model) -40 ... 70 °C (-40 ... 158 °F) (2-D model)

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Technical Data

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 IIB T4 Gb Ⓢ II 2D Ex ib IIIC T135°C Db 2-D model: Ⓢ II 2G Ex ib op is IIB T4 Gb Ⓢ II 2D Ex ib op is IIIC 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 .

Product Versions

Model No.	Description
IDM-Z1-164-D-1D-J1-SU-P-N0	Corded, 1-D code reader Explosion protection: ATEX & IECEx Zone 1/21 Protocol: USB/Serial (depends on connection cable) Supports PDF417 barcodes NOTE: Connection cable not included. Order separately!
IDM-Z1-264-D-2D-J1-S1-N-N0	Corded, 2-D code reader Explosion protection: ATEX & IECEx Zone 1/21 Protocol: USB/Serial (depends on connection cable) NOTE: Connection cable not included. Order separately!