



# Bluetooth® 1-D and 2-D Handheld Reader for Zone 2/22

## IDM-Z2-x61-M-\*

- Approved for Zone 2 and 22 (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

### Bluetooth® 1-D and 2-D Handheld Reader for Zone 2/22



### Function

IDM-Z2-x61-M-\* Bluetooth® handheld readers scan 1-D and 2-D codes in Zone 2/22 hazardous locations. 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. The readers are charged in IDM-Z2-x61-\* charger/base stations and can handle up to 60 000 scans with a fully charged battery.

### Technical Data

General specifications	
Radio distance (in open air)	1-D model: max. 30 m 2-D model: max. 100 m
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	50 ... 800 mm (1-D model) 30 ... 380 mm (2-D model)
Resolution	ca. ≥ 0.76 mm (1-D models) ca. ≥ 0.13 mm (2-D model)
Operating duration	up to 60 000 scans with fully charged battery
Indicators/operating means	
Indicators	2 x LED (operating state) beeper/buzzer (can be switched off)
Electrical specifications	
Battery type	lithium ion 3.6 V, smaller 3000 mAh
Current consumption	330 mA standby: 80 ... 130 mA peak: 500 mA
Interface	
Interface type	Bluetooth v4.0 EDR , Class 1
Transmitter frequency	2.4 ... 2.4835 GHz (ISM band)
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61000-6-2:2005 + AC:2005 , EN 61000-6-4:2007 + A1:2011

Release date: 2022-11-29 Date of issue: 2022-11-29 Filename: t202289\_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com







Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

**PF** PEPPERL+FUCHS

## Technical Data

<b>Explosion protection</b>		
Directive 2014/34/EU		EN 60079-0:2018 EN 60079-11:2012
<b>Radio and telecommunication terminal equipment</b>		
Directive 2014/53/EU		EN 300328 V2.1.1:2016 , EN 301489-1 V2.2.0:2017 , EN 301489-17 V3.2.0:2017
<b>RoHS</b>		
Directive 2011/65/EU (RoHS)		EN 50581:2012
<b>Conformity</b>		
Supplementary standard conformity		EN 60950-1:2006+A1:2010+A2:2013+A11:2009+A12:2011
<b>Ambient conditions</b>		
Operating temperature		-20 ... 50 °C (-4 ... 122 °F)
Storage temperature		-30 ... 70 °C (-22 ... 158 °F)
Relative humidity		95 % non-condensing
Impact resistance		50 fall tests from 2 m height onto concrete
<b>Mechanical specifications</b>		
Degree of protection		IP65
Mass		approx. 220 g
Dimensions		(1-D model) 104 mm x 185 mm x 76 mm (2-D model) 104 mm x 185 mm x 76 mm
<b>Data for application in connection with hazardous areas</b>		
EU-type examination certificate		IBExU19ATEXB016X IECEX IBE 19.0026X
Marking		Ⓢ II 3G Ex ic IIB T4 Gc Ⓢ II 3D Ex ic IIIC T135°C Dc
<b>General information</b>		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Accessories

	<b>IDM-Z2-x61-C-N0-BT-N0</b>	Charging station for IDM-Z2-* without Bluetooth® functionality (Non-hazardous area)
	<b>SCANNER-HOLDER-U1-XX00-N0</b>	Stainless steel holder for for IDM-Z1- handheld readers, compatible with AG-XX00 housing
	<b>IDM-Z2-x61-B-J2-BT-N0</b>	Base station for IDM-Z2-* (Zone 2/22)
	<b>SCANNER-HOLDER-U1-AG1-N0</b>	Stainless steel holder for for IDM-Z1- handheld readers, compatible with AG1 housing
	<b>SCANNER-HOLDER-U1-3200-N0</b>	Stainless steel holder for IDMx6x handheld readers and Ident-Ex® 01, compatible with AG-3200 housing
	<b>IDM-Z2-x61-B-N0-BT-N0</b>	Base station for IDM-Z2-* (Non-hazardous areas)

Release date: 2022-11-29 Date of issue: 2022-11-29 Filename: t202289\_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

 **PEPPERL+FUCHS**

## Product Versions

Model number	Description
IDM-Z2-161-M-1D-*2-BT-N-N0	Radio hand-held scanner for hazardous areas Version: Wireless, Bluetooth® Reading unit: 1-D codes Ex approval: ATEX & IECEx Zone 2/22
IDM-Z2-161-M-1D-*2-BT-P-N0	Radio hand-held scanner for hazardous areas Version: Wireless, Bluetooth® Reading unit: 1-D codes, incl. PDF417 barcodes Ex approval: ATEX & IECEx Zone 2/22
IDM-Z2-261-M-2D-*2-BT-N-N0	Radio hand-held scanner for hazardous areas Version: Wireless, Bluetooth® Reading unit: 2-D codes Ex approval: ATEX & IECEx Zone 2/22

Release date: 2022-11-29 Date of issue: 2022-11-29 Filename: t202289\_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

 **PEPPERL+FUCHS**