# **Instruction Manual**

### 1. Marking

Handheld Scanner with Cable, 1-D IDM-Z2-164-D-1D-J2-SU-P-N0

Equipment protection level Gc

ATEX certificate: IBExU 19 ATEX B016 X
ATEX marking: © II 3G Ex ic IIC T4 Gc
IECEx certificate: IECEx IBE 19.0026X
IECEx marking: Ex ic IIC T4 Gc

Equipment protection level Dc

ATEX certificate: IBExU 19 ATEX B016 X
ATEX marking: 
II 3D Ex ic IIIC T135°C Dc
IECEx certificate: IECEx IBE 19.0026X
IECEx marking: Ex ic IIIC T135°C Dc

Handheld Scanner with Cable, 2-D IDM-Z2-264-D-2D-J2-S1-N-N0

Equipment protection level Gc

ATEX certificate: IBExU 19 ATEX B016 X ATEX marking: © II 3G Ex ic IIB T4 Gc IECEx certificate: IECEx IBE 19.0026X

IECEx marking: Ex ic IIB T4 Gc Equipment protection level Dc

ATEX certificate: IBExU 19 ATEX B016 X ATEX marking: 
Il 3D Ex ic IIIC T135°C Dc IECEx certificate: IECEx IBE 19.0026X IECEx marking: Ex ic IIIC T135°C Dc

Pepperl+Fuchs Group

Lilienthalstraße 200, 68307 Mannheim, Germany

Internet: www.pepperl-fuchs.com

### 2. Validity

Specific processes and instructions in this instruction manual require special provisions to guarantee the safety of the operating personnel.

## 3. Target Group, Personnel

Responsibility for planning, assembly, commissioning, operation, maintenance, and dismounting lies with the plant operator.

The personnel must be appropriately trained and qualified in order to carry out mounting, installation, commissioning, operation, maintenance, and dismounting of the device. The trained and qualified personnel must have read and understood the instruction manual.

### 4. Reference to Further Documentation

Observe laws, standards, and directives applicable to the intended use and the operating location. Observe Directive 1999/92/EC in relation to hazardous areas.

Observe laws, standards, and directives applicable to the intended use and the operating location.

The corresponding datasheets, manuals, declarations of conformity, EU-type examination certificates, certificates, and control drawings if applicable (see datasheet) are an integral part of this document. You can find this information under www.pepperl-fuchs.com.

For specific device information such as the year of construction, scan the QR code on the device. As an alternative, enter the serial number in the serial number search at www.pepperl-fuchs.com.

Refer to the relevant certificate to see the relationship between the connected circuit type, the maximum permitted ambient temperature, the temperature class, and the effective inner reactances.

Due to constant revisions, documentation is subject to permanent change. Please refer only to the most up-to-date version, which can be found under www.pepperl-fuchs.com.

### 5. Intended Use

The device is only approved for appropriate and intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

The device allows the acquisition of data under extreme conditions. The device ensures the reliable reading of 1-D barcodes and/or 2-D stacked codes. The device is intended for use in industrial applications.

The device must only be operated in the specified ambient temperature range and at the specified relative humidity without condensation.

Take the intended use of the connected devices from the corresponding documentation.

The device is an electrical apparatus for hazardous areas.

The device is intended for indoor use.

The device is designed for a maximum altitude of 2000 m.

Devices for which specific conditions of use apply have the X marking at the end of the certificate number.

#### Specific Conditions of Use

Use the device only within the specified ambient temperature range.

#### 6. Improper Use

Protection of the personnel and the plant is not ensured if the device is not used according to its intended use.

#### 7. Mounting and Installation

Prior to mounting, installation, and commissioning of the device you should make yourself familiar with the device and carefully read the instruction manual.

Only use accessories specified by the manufacturer.

Observe the installation instructions according to IEC/EN 60079-14.

When connecting intrinsically safe devices with intrinsically safe circuits of associated apparatus, observe the maximum peak values with regard to explosion protection (verification of intrinsic safety). Observe the standards IEC/EN 60079-14 or IEC/EN 60079-25.

If circuits with type of protection  $\mathsf{Ex}$  i are operated with non-intrinsically safe circuits, they must no longer be used as circuits with type of protection  $\mathsf{Ex}$  i.

Keep the separation distances between all non-intrinsically safe circuits and intrinsically safe circuits according to IEC/EN 60079-14.

Observe the compliance of the separation distances between two adjacent intrinsically safe circuits according to IEC/EN 60079-14.

Observe the grounding requirements for type of protection Ex i according to IEC/EN 60079-14.

For intrinsically safe circuits, the dielectric strength of the insulation against other intrinsically safe circuits and against the shield must be at least 500 V according to IEC/EN 60079-14.

Equipotential bonding must be achieved along the intrinsically safe circuits.

#### **Requirements for Cables and Connection Lines**

Only cables and connection lines that meet the requirements of the respective hazardous area certificate of the device may be connected to the intrinsically safe connection.

Only use cables and connection lines with a temperature range appropriate to the application.

Observe the maximum permissible length of cables and connection lines. Observe the permissible cable type and cable length given in the  $\,$ 

respective hazardous area certificate.

Regarding the verification of intrinsic safety, observe the maximum

permissible external capacitance of this device and the other devices in the circuit.

The dielectric strength of the insulation must be at least 500 V according to IEC/EN 60079-14.

Observe the permissible core cross section of the conductor.

The insulation stripping length must be considered.

Observe the minimum bending radius of the conductors.

### Requirements in Relation to Electrostatics

Avoid electrostatic charges which could result in electrostatic discharges while installing, operating, or maintaining the device.

Avoid inadmissibly high electrostatic charge of the cables and connection lines.

An electrostatic charge poses an ignition hazard in case of discharge.

#### 8. Operation, Maintenance, Repair

Prior to using the product make yourself familiar with it. Read the instruction manual carefully.

Observe IEC/EN 60079-17 for maintenance and inspection.

Do not use a damaged or polluted device.

The device must not be repaired, changed, or manipulated. In case of failure, always replace the device with an original device.

When detecting a damage, remove the device from the hazardous area. If the device is installed in potentially explosive dust atmosphere, remove dust layers which exceed 5 mm in regular intervals.

Observe the warning markings.

Do not remove the warning markings.

If cleaning is necessary while the device is located in a hazardous area, in order to avoid electrostatic charging only use a clean damp cloth.

### 9. Delivery, Transport, Disposal

Check the packaging and contents for damage.

Check if you have received every item and if the items received are the ones you ordered.



Keep the original packaging. Always store and transport the device in the original packaging.

Store the device in a clean and dry environment. The permitted ambient conditions must be considered, see datasheet.

The device, built-in components, packaging, and any batteries contained within must be disposed in compliance with the applicable laws and guidelines of the respective country.

