# **Instruction Manual**

### 1. Marking

Corded Handheld Reader, 1-D

IDM-Z2-160-D-1D-J2-SU-\*-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

Corded Handheld Reader, 2-D

IDM-Z2-260-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: 
II 3D Ex ic IIIC T135°C Dc
IECEx certificate: IECEx IBE 19.0026X
IECEx marking: Ex ic IIIC T135°C Dc

The \*-marked letters of the type code are placeholders for versions of the device.

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#### 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.

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 handheld reader 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.

Use the device only within the specified ambient and operating conditions.

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

The device is an electrical apparatus for hazardous areas.

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

#### 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

Only use accessories specified by the manufacturer.

Observe the installation instructions according to IEC/EN 60079-14. If circuits with type of protection Ex i are operated with non-intrinsically safe circuits, they must no longer be used as circuits with type of

protection Ex i.

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**

Observe the maximum permissible length of cables and connection lines. The dielectric strength of the insulation must be at least 500 V according to IFC/FN 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 repair, modify, or manipulate the device.

Do not use a damaged or polluted device.

If there is a defect, always replace the device with an original device.

If there is a defect, the device must be repaired by Pepperl+Fuchs.

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.

