

IDM-Z1-161-M-1D-J1-BT-N-N0  
IDM-Z1-161-M-1D-J1-BT-P-N0  
IDM-Z1-261-M-2D-J1-BT-N-N0

Bluetooth handheld scanner  
for use in explosion-  
hazardous areas Zone 1/21

Manual



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With regard to the supply of products, the current issue of the following document is applicable: The General Terms of Delivery for Products and Services of the Electrical Industry, published by the Central Association of the Electrical Industry (Zentralverband Elektrotechnik und Elektroindustrie (ZVEI) e.V.) in its most recent version as well as the supplementary clause: "Expanded reservation of proprietorship"

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# 1 Safety

## 1.1 Introduction

### 1.1.1 Content of this Document

This document contains information required to use the product in the relevant phases of the product life cycle. This may include information on the following:

- Product identification
- Delivery, transport, and storage
- Mounting and installation
- Commissioning and operation
- Maintenance and repair
- Troubleshooting
- Dismounting
- Disposal



#### Note

For full information on the product, refer to the further documentation on the Internet at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

The documentation comprises the following parts:

- This document
- Datasheet

In addition, the documentation may comprise the following parts, if applicable:

- EU-type examination certificate
- EU declaration of conformity
- Attestation of conformity
- Certificates
- Control drawings
- Instruction manual
- Other documents

### 1.1.2 Manufacturer

|  |
|--|
| Pepperl+Fuchs Group<br>Lilienthalstraße 200, 68307 Mannheim, Germany |
|--|

|  |
|--|
| Internet: <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> |
|--|

### 1.1.3 Target Group, Personnel

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

Only appropriately trained and qualified personnel may carry out mounting, installation, commissioning, operation, maintenance, and dismantling of the product. The personnel must have read and understood the instruction manual and the further documentation.

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

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### 1.1.4 Symbols Used

This document contains symbols for the identification of warning messages and of informative messages.

#### Warning Messages

You will find warning messages, whenever dangers may arise from your actions. It is mandatory that you observe these warning messages for your personal safety and in order to avoid property damage.

Depending on the risk level, the warning messages are displayed in descending order as follows:



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#### **Danger!**

This symbol indicates an imminent danger.

Non-observance will result in personal injury or death.

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#### **Warning!**

This symbol indicates a possible fault or danger.

Non-observance may cause personal injury or serious property damage.

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#### **Caution!**

This symbol indicates a possible fault.

Non-observance could interrupt the device and any connected systems and plants, or result in their complete failure.

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#### Informative Symbols



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#### **Note**

This symbol brings important information to your attention.

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#### **Action**

This symbol indicates a paragraph with instructions. You are prompted to perform an action or a sequence of actions.

## 2 Technical Specifications

### 2.1 Explosion Protection



#### 1D-Modelle:

⊕ II 2G Ex ib IIB T4 Gb

⊕ II 2D Ex ib IIIC T135°C Db

#### 2D-Modelle:

⊕ II 2G Ex ib op is IIB T4 Gb

⊕ II 2D Ex ib op is IIIC T135°C Db

#### Test certificate

IBExU18ATEX1050  
IECEX IBE 18.0009

#### Manufacturer

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## 2.2 Technical Data for Bluetooth Scanner

|                              | IDM-Z1-161-M-1D-J1-BT-N-N0  | IDM-Z1-161-M-1D-J1-BT-P-N0                                      | IDM-Z1-261-M-2D-J1-BT-N-N0  |
|------------------------------|---|---|---|
| Description                  | Linear imager   |   | 2-D imager  |
| Barcode                      | One-dimensional 1-D (barcode)   | One-dimensional 1-D (Barcode and stacked code incl. PDF417)     | One-dimensional 1-D & 2-D (Barcode and stacked code incl. PDF417) |
| 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 codes                | -   | PDF417, Micro-PDF417, Code 49, Code 16K, Composite, Codablock F |   |
| 2-D code types               | -   |   | Data Matrix, QR code, MicroQR-Code, Aztec, MaxiCode               |
| Light source                 | LED, visible red light (630 nm)   |   |   |
| Scan frequency               | 500 Hz  |   | 60 Hz   |
| Reading distance             | 20 mm ... 850 mm  |   | 30 mm ... 400 mm  |
| Code resolution              | Approx. $\geq 0.076$ mm   |   | Approx. $\geq 0.13$ mm  |
| Immunity to extraneous light | 100,000 lx  |   |   |
| Electrical data              |   |   |   |
| Current consumption          | 330 mA (Standby 80/130 mA; Peak 500 mA)   |   |   |
| Battery                      | Lithium ion battery 3.6 V; 1500 mAh   |   |   |
| Battery power                | Up to 60,000 scans at full battery charge   |   |   |
| Feedback                     |   |   |   |
| Visual                       | 2 x LED (operating state/read confirmation)   |   |   |
| Acoustic                     | Buzzer (can be switched off)  |   |   |
| Ambient conditions           |   |   |   |
| Shock resistance             | 50 drop tests on concrete from a height of 2 m  |   |   |
| Operating temperature        | -20 °C to +50 °C  |   |   |
| Storage temperature          | -30 °C to +70 °C  |   | -40 °C to +70 °C  |
| Relative humidity            | 95 % non-condensing   |   |   |
| Mechanical data              |   |   |   |
| Degree of protection         | IP65  |   |   |
| Dimensions [W x H x D]       | 104 mm x 176 mm x 76 mm   |   |   |
| Weight                       | Approx. 260 g   |   |   |

## 2.3 Use

The handheld scanner is a piece of handheld apparatus.

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It enables portable recording and direct data transfer of barcodes and 2-D codes in explosion-hazardous areas. The device is specifically modified for use in explosion-hazardous areas of Zone 1 and Zone 21.

## 3 SYSTEM STRUCTURE

### 3.1 Overview

The Bluetooth handheld scanners and their accessories are presented in the following overview. Charging the handheld scanner batteries can take place within the hazardous area using the Zone 1/21 certified base station and the associated power module. Furthermore, the scanner can be charged in the safe area using a base station/charging cradle.

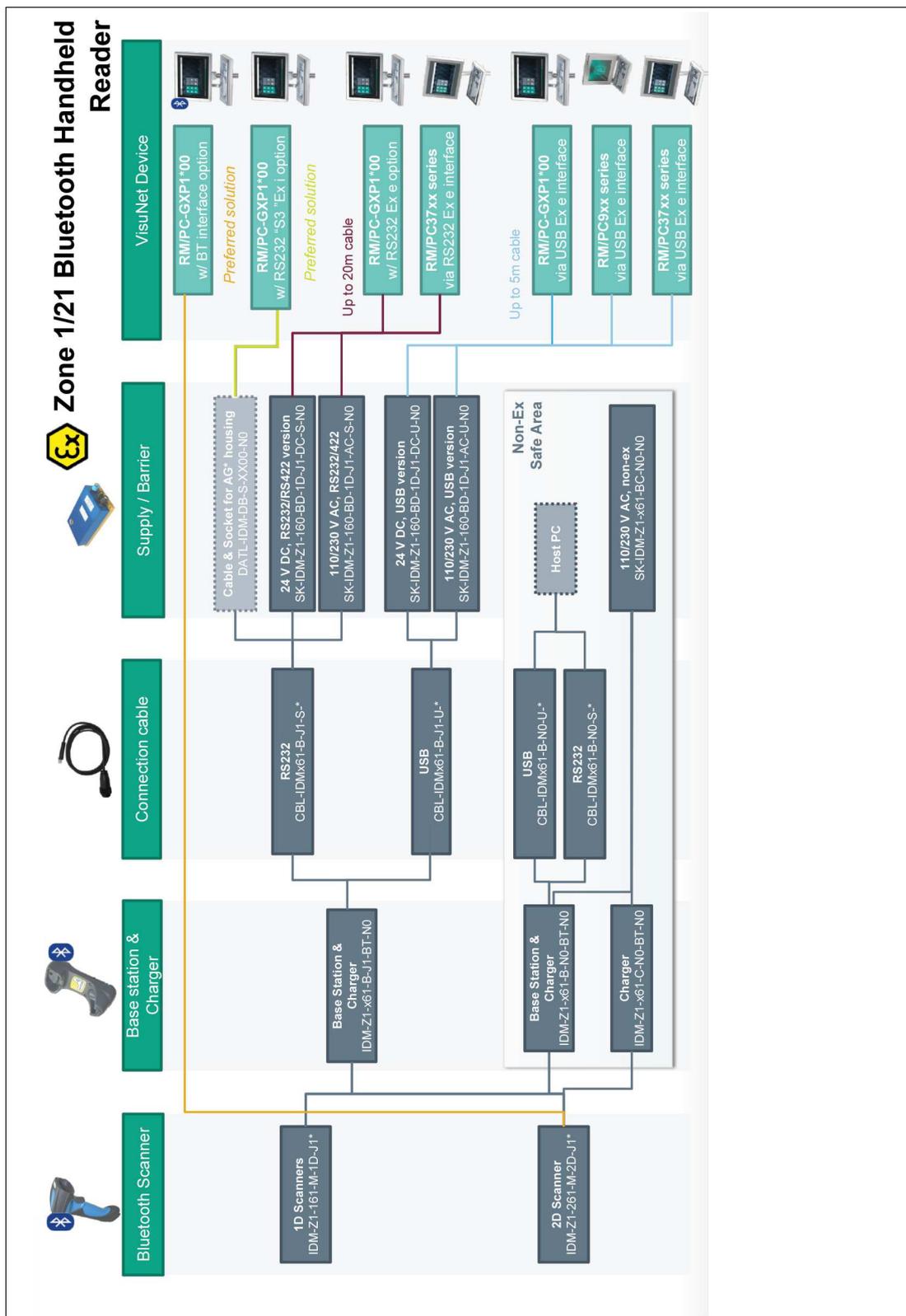


Figure 3.1 Handheld scanners and accessories

In the following two chapters, the typical usage cases are described in more detail.

## 3.2 System Structure 1

### Charger & Base Station, RS232 connection to internal VisuNet GXP barrier

Overview of the complete system structure 1: Bluetooth handheld scanners IDM-Z1-161-M-1D-J1-BT-\*, IDM-Z1-261-M-2D-J1-BT-N-N0, and base station connected to intrinsically safe RS232 Ex i interface VisuNet GXP.

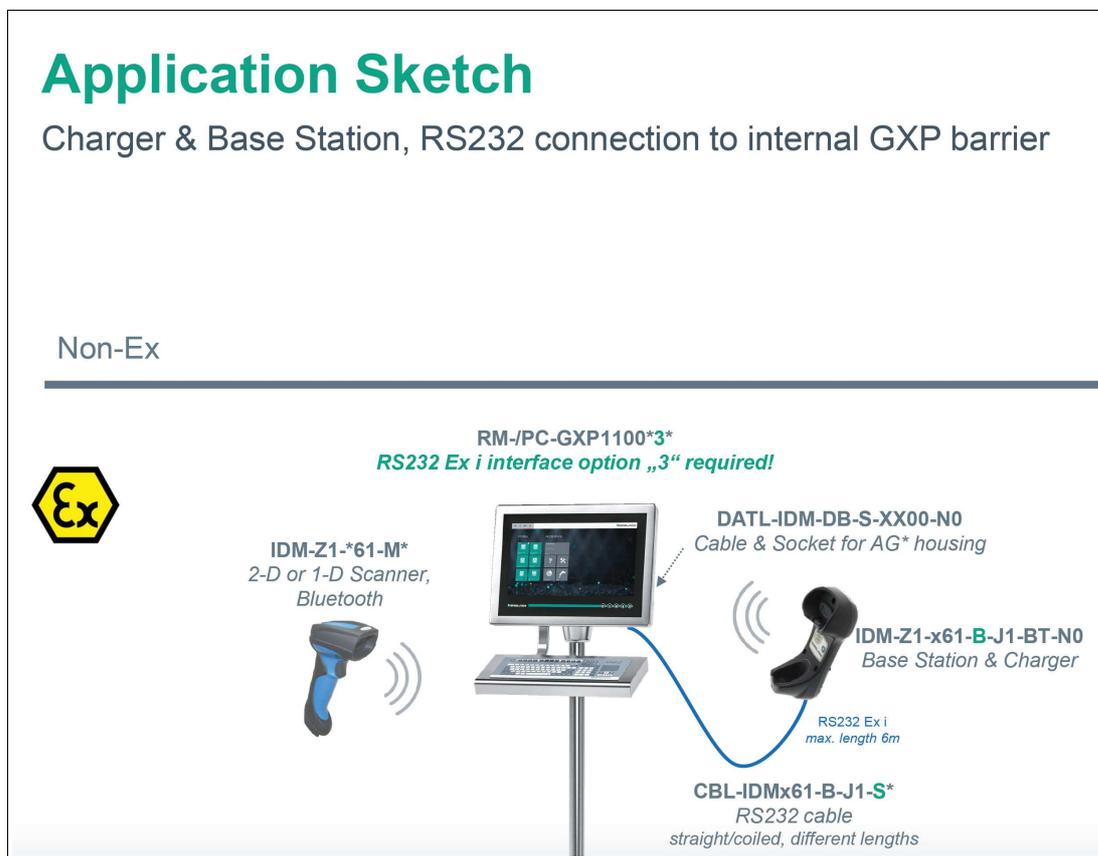


Figure 3.2 System structure 1 - base station connected to RS232 Ex i interface GXP

#### Description:

The Bluetooth handheld scanner has been designed with the battery for explosion-hazardous areas. For proper operation in explosion-hazardous areas, a IDM-Z1-x61-B-J1-BT-N0 base station, a CBL-IDM-Z1-x61-B-J1\* cordset, the DATL-IDM-DB-SXX00-N0 connection cable, and the RS232 Ex i interface option of the VisuNet GXP are required.

In this setup the data is directly send via the base station to the GXP intrinsically safe RS232 Ex i interface. As an alternative, the communication between the Bluetooth handheld scanner and the GXP can be realized via the built in Bluetooth receiver of the VisuNet GXP Display Unit.

The IDM-Z1-x61-B-J1-BT-N0 base station can be used in both cases as a charging cradle to charge the scanner in explosion-hazardous areas.

## 3.3 System Structure 2

### System / Stand-alone setup

Overview of the complete system structure 2: Bluetooth handheld scanners IDM-Z1-161-M-1D-J1-\*, IDM-Z1-261-M-2D-J1-BT-N-N0, and base station and power module in explosion-hazardous areas.



Figure 3.3 System structure 2 – scanner with base station connected to VisuNet GXP (Option 1)

### Description:

The Bluetooth handheld scanner has been designed with the battery for explosion- hazardous areas. For proper operation in explosion-hazardous areas an IDM-Z1-x61- B-J1-BT-N0 base station, a CBL-IDM-Z1-x61-B-J1\* cordset between the base station and the SK-IDM-Z1-160-BD-1D-J1\* supply module, and a connection cable to the power supply are required.

Data can be transferred directly using an HMI system with Bluetooth interface (e.g., VisuNet GXP) (option 1) or using the base station, which can be connected to a host PC via the power supply module and a data line (option 2).

In the case of option 1, the IDM-Z1-x61-B-J1-BT-N0 base station can be used purely as a charging cradle. A data line to a host PC is not needed in this case.

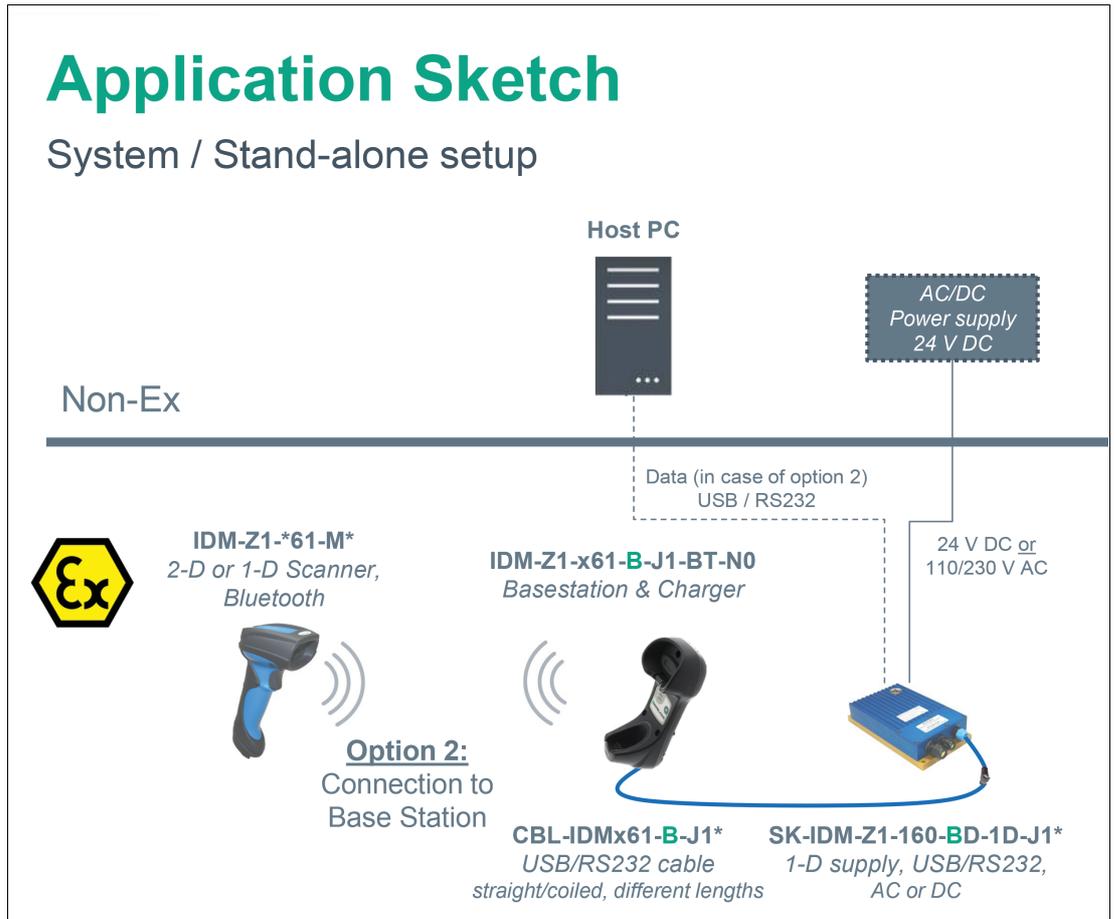


Figure 3.4 System structure 2 – scanner with base station connected to barrier (Option 2)



**Note**

The Supply module is available for RS232 and USB, make sure to use the compatible RS232 or USB cables.

### 3.4 System Structure 3

#### VisuNet GXP Bluetooth option / Charger in safe area

Overview of the complete system structure 3: Bluetooth handheld scanner and charging cradle in non-explosion-hazardous areas

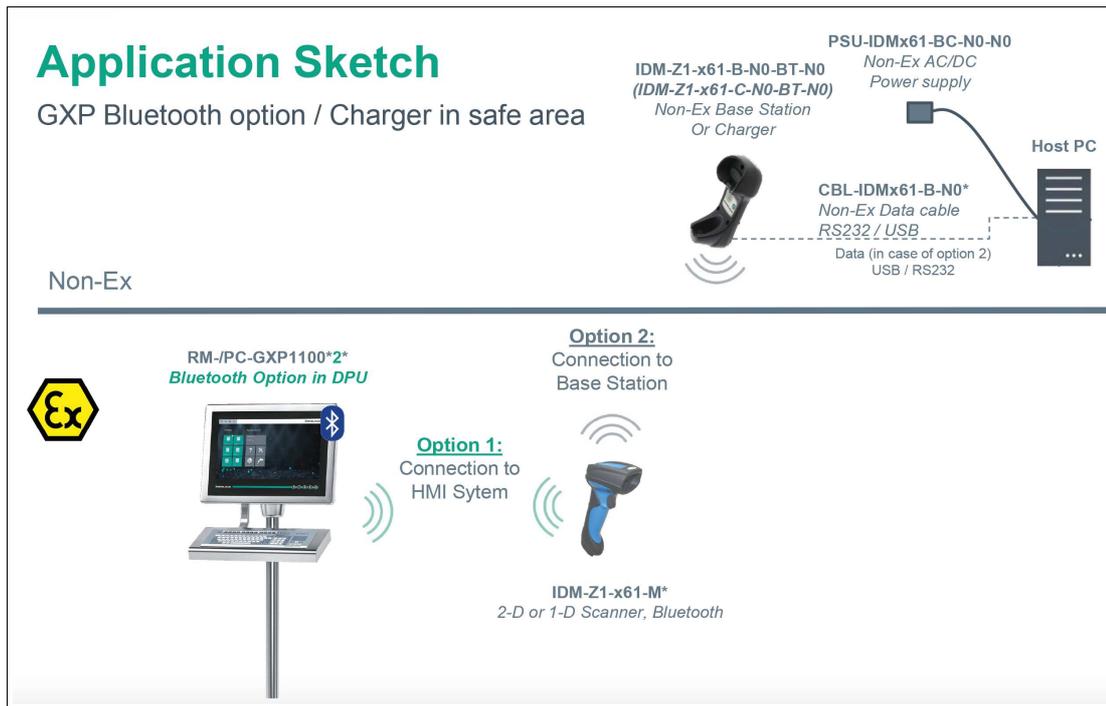


Figure 3.5 System structure 3 - scanner with a base station in the safe area/Bluetooth option VisuNet GXP

### Description:

The Bluetooth handheld scanners can be used alone in explosion-hazardous areas; the base station and charging cradle can be installed in the safe area.

Depending on the application, communication with a Bluetooth-enabled operator workstation (e.g., VisuNet GXP) can be realized (option 1). In this case, it is possible to use the IDMx61-C-N0-BT-N0 charging cradle in the safe area to charge the scanner.

Instead of just the charging cradle, the non-explosion hazardous area base station IDMx61-B-N0-BT-N0 can be used (option 2).

In this scenario a Host PC needs to be connected to the Non-Ex Base Station or Charger to realize the datatransfer. RS232 and USB cables are available in different lengths. The SUB-D9 connector of the RS232 needs additionally be connected to the PSU-IDMx61-BC-N0-N0 Non-Ex AC/DC Power Supply.

If USB 3.0 is available in your host device, both battery charging and regular operation can be supported by the USB Bus Power without using external power supply. If you want to use this feature, set the USB bus power switch to "ON". Then connect the cradle and host device via an USB cable.

If only USB 2.0 is available in your host device the external power supply is necessary as a power source, because the power supplied from USB 2.0 is not enough to support both battery charging and regular operation simultaneously.



Figure 3.6 PSU-IDMx61-BC-N0-N0 Non-Ex Power Supply needs to be connected to the SUB-D9 connector

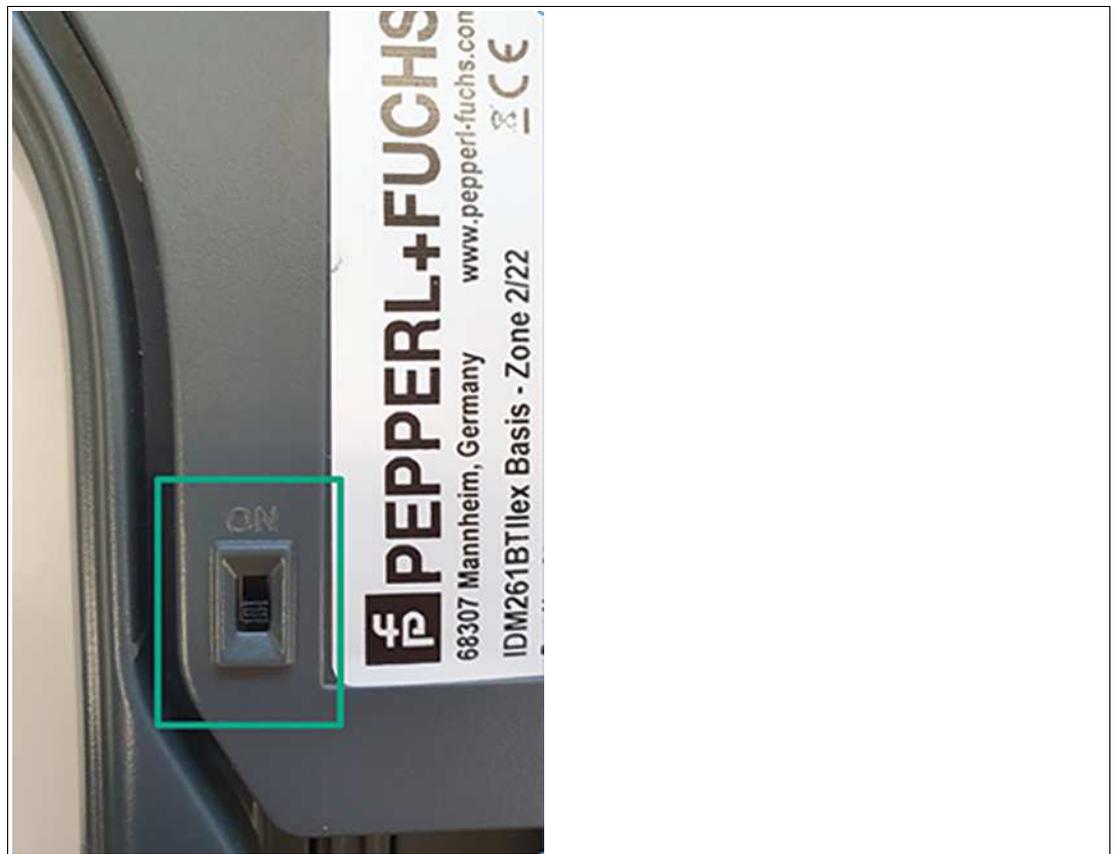


Figure 3.7 When USB 3.0 is available set the USB bus power switch to "ON". Then connect the cradle and host device via an USB cable.

## 4 Commissioning

### 4.1 Preparing Bluetooth Handheld Scanners



#### Note

Please charge the new battery pack for 8 hours prior to the first use



#### Danger!

The battery must not be changed or inserted in explosion-hazardous areas. Improper handling can void the type approval.



#### Preparation of Bluetooth handheld scanners

The battery compartment is located on the underside of the Bluetooth handheld scanner. Loosen the screw with a suitable tool to remove the cover. After loosening the screw, some force is required to remove the cover.



Figure 4.1 Removing the battery compartment lid

The battery is required to commission the Bluetooth handheld scanner. The protective cap must be removed before inserting the battery into the handheld scanner.



Figure 4.2 Removing the protective battery cap



**Danger!**

The designated battery must only be used!

The battery is inserted into the compartment on the handheld scanner. The end of the pull tab must be seen protruding out of the opening of the handheld scanner. If the battery is inserted correctly and connected to the contacts, there is an audible and visual signal. The opening must be completely sealed again. Before commissioning, check whether the screw cap has been properly sealed.



Figure 4.3 Inserting the battery and closing the protective cap



**Using the base station in explosion-hazardous areas - system structure 1**

Use the connection cable CBL-IDMx\* to connect the base station to the supply module SK-IDM-Z1\*. First, install the RJ50 male connector of the connection cable into the RJ50 port of the base station. The port is located on the bottom side of the base station. The connection cable is properly installed when you can hear an acoustical click. Please ensure that the connection cable is firmly connected. Then proceed and connect the M12 connector of the connection cable with the female M12 connector of the supply module base connection cable. This cable is pre-installed and shipped with the supply module.

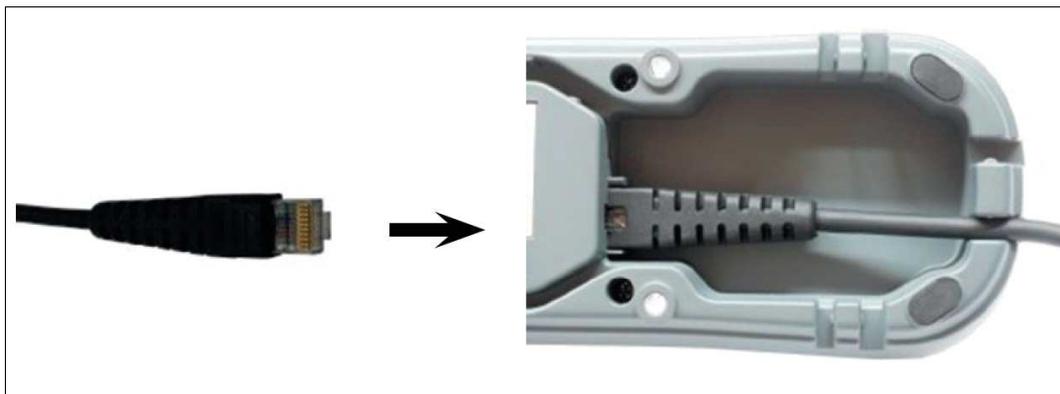


Figure 4.4 Connecting RJ45 connector of connection cable CBL-IDM\* to base station



Figure 4.5 Male M12 connector of connection cable CBL-IDM\*



Figure 4.6 Female M12 connector of pre-installed base connection cable of the supply module SK-IDM-Z1\*

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Figure 4.7 Connecting the plug coupling to the supply module basic connection line  
The handheld scanner is placed in the charger. The underside of the handle is used first to ensure that the charging contacts are properly connected. The LED light on the scanner head indicates successful charging.



Figure 4.8 Inserting the scanner into the base station



## Using the base station in non-explosion hazardous areas - system structure 2

With a non-explosion-protected base station, charging in non-explosion hazardous areas can be performed using the PSU-IDMx61-BC-N0-N0 power supply. The cable is plugged into the opening for this at the bottom of the base station. For a base station for explosion-hazardous areas, this connection is sealed at the factory.



Figure 4.9 Connecting the power supply for the non-explosion-hazardous base station

To connect in the non-explosion-protected area, the cable to connect to the power supply and to the PC is inserted into the opening for this at the bottom of the base station. An audible click can be heard when the cable is fully inserted. It must be verified that the cable is firmly anchored.



Figure 4.10 Connecting the RJ50 cable to the base station

The handheld scanner is placed in the charger. The underside of the handle is used first to ensure that the charging contacts are properly connected. The LED light on the scanner head indicates successful charging.

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Figure 4.11 Inserting the scanner into the base station

## 4.2 Pinout of Supply Module with RS232 or USB

### Supplying the base station according to system structure 2 via connector - plug/coupling.

The terminal assignment is located under the unscrewable opening on the front of the supply module.



#### **Danger!**

Do not open the housing in the explosion-hazardous area

Before the device is put into operation in explosion-hazardous areas, it must be ensured that the housing is completely closed again and screwed on properly.

Changes to the pinout may only be carried out by trained and qualified personnel.

### Connection of the base station to the supply module RS232 or USB via connector - plug/coupling

The terminal assignment is located under the unscrewable opening on the front of the supply module.

- (1) Ex e terminal compartment to connect the power supply and the data line
- (2) Ex i terminal compartment to connect the consumers (base station/scanner)

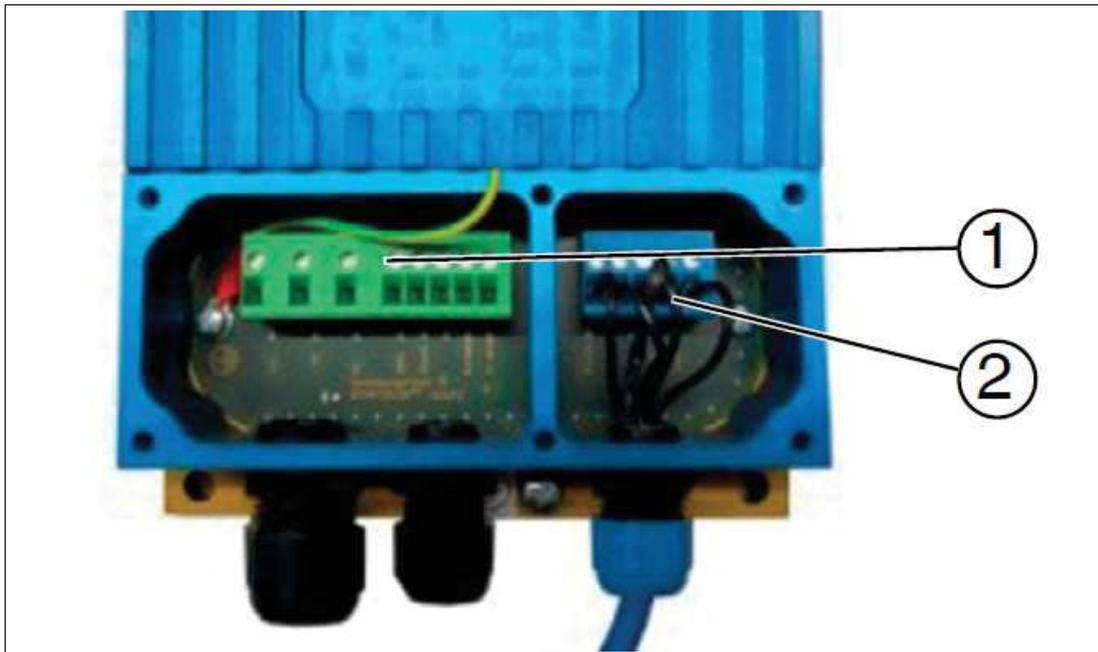


Figure 4.12 Supply module terminal compartment

**External connection lines:**

|                                   |   |
|-----------------------------------|---|
| Data lines                        | USB: 0.2 – 2.5 mm <sup>2</sup> , 4-core or<br>RS232: 0.2 – 2.5 mm <sup>2</sup> 3-core |
| Supply line                       | 0.2 – 2.5 mm <sup>2</sup> 3-wire  |
| (see accessories in the appendix) |   |

The Bluetooth handheld scanner, the base station, and the supply module may be connected and used in explosion-hazardous areas. The current rating of the connection line must be observed.

The blue base connection cable is delivered pre-assembled with the supply module SK-IDM-Z1-\*. The cable consists of a M12 connector plug and a 3-core cable. The individual cores are numbered (printed on the core insulation) and must be connected as follows (4.2 RS232 interface and 4.3 USB interface) to the intrinsically safe terminals of the supply module.

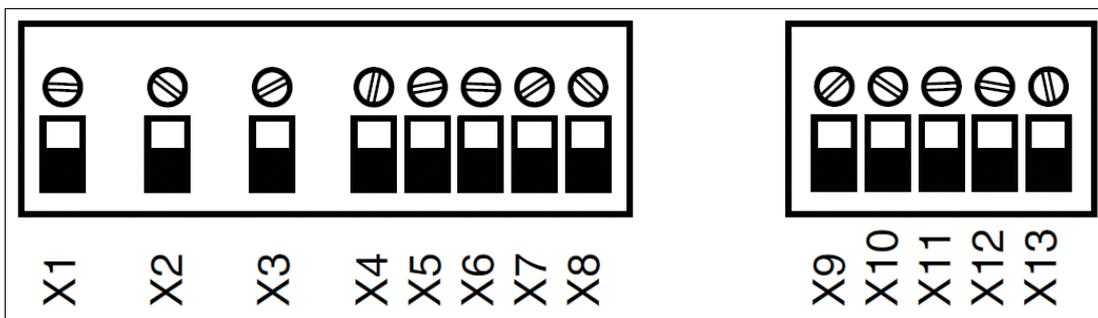


Figure 4.13 Terminal blocks in the terminal compartment

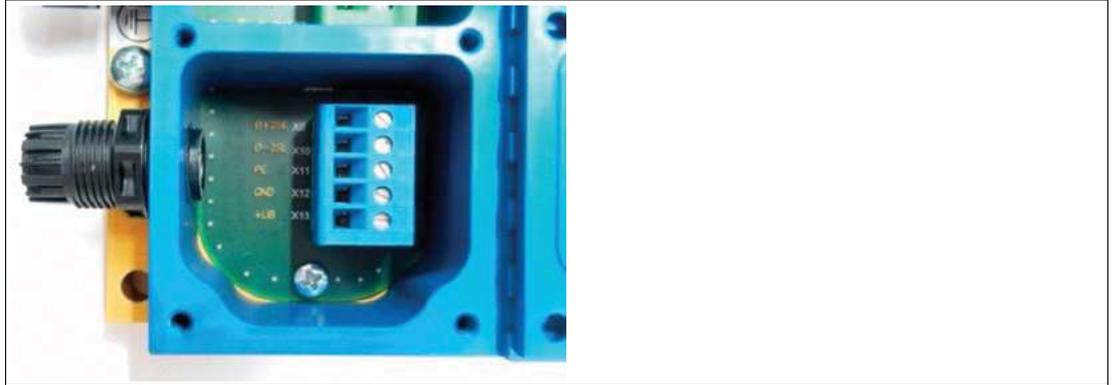


Figure 4.14 Intrinsic safety terminal compartment of the supply module after removing the connector connection cores

### 4.3 Base connection line RS232

#### Assignment of pre-installed base connection cable to supply module (RS232)

| Assignment of pre-assembled connection coupling |                  | Supply module terminal compartment |        |
|---|------------------|------------------------------------|--------|
| Pin   | Core designation | Designation                        | Number |
| 3   | 3                | RxD                                | X9     |
|   |                  | GND                                | X10    |
|   |                  | PE                                 | X11    |
| 2   | 2                | GND                                | X12    |
| 1   | 1                | +UB                                | X13    |

#### Direct connection of the base station without a plug/coupling to the supply module with RS232 interface

The base station can be connected directly to the supply module without using the blue base connection cable.

The assignment of the serial base station cable CBL-IDM-x61\* is outlined in the following table.

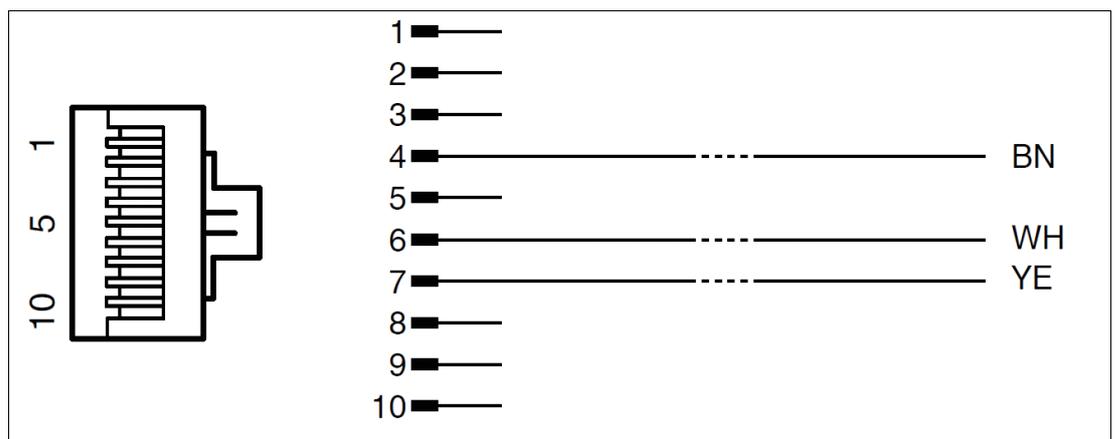


Figure 4.15 Connection layout

**Assignment of connection cable CBL-IDM-x61\* to supply module (RS232)**

| Cordset assignment |              | Supply module terminal compartment |            |
|--------------------|--------------|------------------------------------|------------|
| RJ50 pinout        | Strand color | Designation                        | Assignment |
| 6                  | White        | TxD                                | X9         |
|                    |              |                                    | X10        |
|                    |              |                                    | X11        |
| 4                  | Brown        | GND                                | X12        |
| 7                  | Yellow       | +UB                                | X13        |



**Note**

Information relating to programming from the SICK AG manual ([www.SICK.com](http://www.SICK.com)) is required for the complete commissioning of the handheld scanner.

## 4.4 Base connection line USB

**Base connection cable USB**

| Pinout of connector plug |             |
|--------------------------|-------------|
| Pin                      | Designation |
| 3                        | D+          |
| 2                        | D-          |
| 4                        | GND         |
| 1                        | +UB         |

**Connection of USB connection cable to supply module**

| Pre-assembled connection coupling |      | Terminal compartment |        |
|-----------------------------------|------|----------------------|--------|
| Pin                               | Core | Designation          | Number |
| 3                                 | 3    | D+                   | X9     |
| 2                                 | 4    | D-                   | X10    |
|                                   |      | PE                   | X11    |
| 4                                 | 2    | GND                  | X12    |
| 1                                 | 1    | +UB                  | X13    |

**Direct connection of the base station without plug/coupling to the supply module with USB interface**

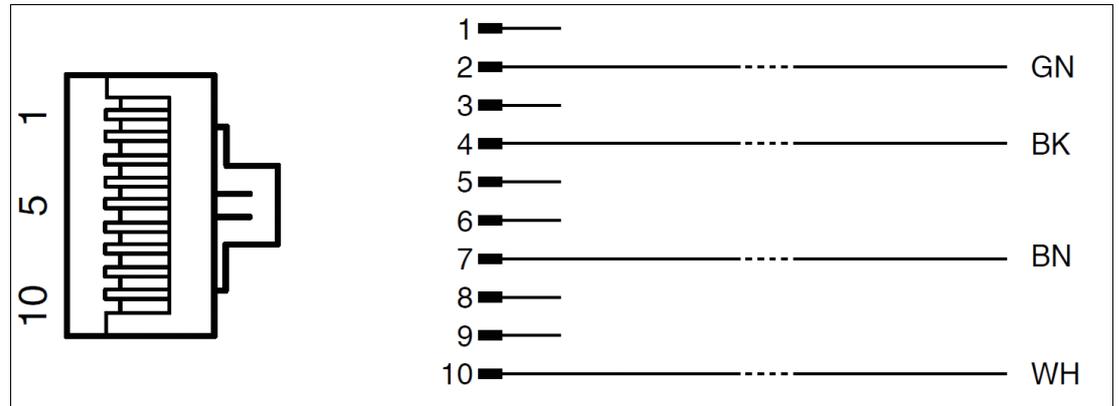


Figure 4.16 RJ45 plug - connection layout

**Base station cordset**

| Cordset assignment |              | Supply module terminal compartment |            |
|--------------------|--------------|------------------------------------|------------|
| RJ45 pinout        | Strand color | Designation                        | Assignment |
| 2                  | Green        | D+2SL                              | X9         |
| 10                 | White        | D-2SL                              | X10        |
|                    |              |                                    | X11        |
| 4                  | Black        | GND                                | X12        |
| 7                  | Brown        | +UB                                | X13        |



**Note**

Information relating to programming from the SICK AG manual ([www.SICK.com](http://www.SICK.com)) is required for the complete commissioning of the handheld scanner.

## 5 Accessories

### Corded Handheld Reader Mounting Accessories

| Item number | Product name                  | Description   | Photo   |
|-------------|-------------------------------|---|---|
| #548267     | SCANNER-HOLDER-U1-XX00-N0     | Scanner holder compatible with Housing AG-XX00<br>Material: Stainless steel AISI 316L (1.4404)<br>Compatible with IDMx6x, ecom IdentEx 01 and PSCAN<br>Prepared for mounting to right side of housing |    |
| #548268     | SCANNER-HOLDER-U1-AG1-N0      | Scanner holder compatible with Housing AG1<br>Material: Stainless steel AISI 316L (1.4404)<br>Compatible with IDMx6x, ecom IdentEx01 and PSCAN<br>Prepared for mounting to right side of housing      |   |
| #548353     | SCANNER-HOLDER-IDMx6x-TRIPOD  | Tripod Scanner holder<br>Compatible to IDMx6x code scanner  |   |
| #548354     | SCANNER-HOLDER-IDMx6x-DESKTOP | Desktop Scanner holder<br>Compatible to IDMx6x code scanner   |  |

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**Bluetooth Handheld Reader Accessories for VisuNet HMI Applications**

| Item Number | Product Name                   | Description  | Photo   |
|-------------|--------------------------------|--|---|
| #70115390   | IDM-Z1-x61-B-J1-BT-N0          | Bluetooth reader base station & charger<br>Ex-protection: ATEX&IECExZone 1/2<br>1Radio Interface: Bluetooth<br>Protocol: USB/Serial (depends on connection cable)<br>Compatible with IDM-Z1-x61-M Bluetooth code readers<br>NOTE: Connection cable not included. Please order separately!                |    |
| #70115391   | IDM-Z1-x61-B-N0-BT-N0          | Bluetooth reader base station & charger<br>Ex-protection: non-Ex, for use in safe area only!<br>Radio Interface: Bluetooth<br>Protocol: USB/Serial (depends on connection cable)<br>Compatible with IDM-Z1-x61-M Bluetooth code readers<br>NOTE: Connection cable not included. Please order separately! |   |
| #70115392   | IDM-Z1-x61-C-N0-BT-N0          | Charger cradle for 1D & 2D Bluetooth reader<br>Ex-protection: non-Ex, for use in safe area only!<br>Compatible with IDM-Z1-x61-M Bluetooth code readers<br>NOTE: Please order connection cable separately!   |   |
| #548396     | HOLDER-BRACKET-XX00-IDMx61-B-N | Bracket to mount IDMx61-B-J1-BT-N0 Base station to AG-XX00 housing.<br>- Material: Stainless steel AISI 304 (1.4301)<br>- Assembly: Right side of AG-XX00 housing<br>- Includes bracket and installation materials<br>- Note: Base station and cables not included!                                      |  |
| #548395     | HOLDER-BRACKET-AG1-IDMx61-B-N0 | Bracket to mount IDMx61-B-J1-BT-N0 Base station to AG1 housing<br>- Material: Stainless steel AISI 304 (1.4301)<br>- Assembly: Right side of AG1 housing<br>- Includes bracket and installation materials<br>- Note: Base station and cables not included!   |   |

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**Bluetooth Handheld Reader Accessories for VisuNet HMI Applications**

| Item Number | Product Name             | Description   | Cable   | Photo   |
|-------------|--------------------------|---|---|---|
| #548345     | CBL-IDMx61-B-N0-S-S18-N0 | Serial connection cable for base station<br>Ex-protection: non-Ex, for use in safe area only!<br>Interface: RJ50 (cradle) to SUB-D9 connector<br>Protocol: serial<br>Compatible with IDM-Zx-x61-B-N0*                     | Straight<br>1,8 m length  |    |
| #548346     | CBL-IDMx61-B-N0-S-C38-N0 | Serial connection cable for base station<br>Ex-protection: non-Ex, for use in safe area only!<br>Interface: RJ50 (cradle) to SUB-D9 connector<br>Protocol: serial<br>Compatible with IDM-Zx-x61-B-N0*                     | Coiled<br>3,8 m length  |   |
| #548343     | PSU-IDMx61-BC-N0-N0      | AC/DC Power supply for Base station & charger<br>Input: 230 V AC<br>Ex-protection: non-Ex, for use in safe area only!<br>Compatible with non-Ex base station & charger<br>IDM-Zx-x61-B-N0-BT-N0 and IDM-Zx-x61-C-N0-BT-N0 | Only required in combination with Serial connection cable for base station (SUB-D9 connector) |    |
| #548347     | CBL-IDMx61-B-N0-U-S18-N0 | USB connection cable for base station<br>Ex-protection: non-Ex, for use in safe area only!<br>Interface: RJ50 (cradle) to USB Type A connector<br>Protocol: USB<br>Compatible with IDM-Zx-x61-B-N0*                       | Straight<br>1,8 m length  |  |
| #548348     | CBL-IDMx61-B-N0-U-C38-N0 | USB connection cable for base station<br>Ex-protection: non-Ex, for use in safe area only!<br>Interface: RJ50 (cradle) to USB Type A connector<br>Protocol: USB<br>Compatible with IDM-Zx-x61-B-N0*                       | Coiled<br>3,8 m length  |   |

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| Item Number | Product Name             | Description   | Cable                    | Photo   |
|-------------|--------------------------|---|--------------------------|---|
| #548349     | CBL-IDMx61-B-J1-S-S18-N0 | Serial connection cable for base station<br>Ex-protection: suitable for Zone 1/21 & Zone 2/22<br>Interface: RJ50 (cradle) to M12 male connector<br>Cable: straight; 1,8m length<br>Protocol: serial<br>Compatible with IDM-Zx-x61-B-J1* base station  | Straight<br>1,8 m length |    |
| #548350     | CBL-IDMx61-B-J1-S-C38-N0 | Serial connection cable for base station<br>Ex-protection: suitable for Zone 1/21 & Zone 2/22<br>Interface: RJ50 (cradle) to M12 male connector<br>Cable: coiled; 3,8m length<br>Protocol: serial<br>Compatible with IDM-Zx-x61-B-J1* base station  | Coiled<br>3,8 m length   |   |
| #548351     | CBL-IDMx61-B-J1-U-S18-N0 | USB connection cable for base station<br>Ex-protection: suitable for Zone 1/21 & Zone 2/22<br>Interface: RJ50 (cradle) to M12 male connector<br>Cable: straight; 1,8m length<br>Protocol: USB<br>Compatible with IDM-Zx-x61-B-J1* base station  | Straight<br>1,8 m length |   |
| #548352     | CBL-IDMx61-B-J1-U-C38-N0 | USB connection cable for base station<br>Ex-protection: suitable for Zone 1/21 & Zone 2/22<br>Interface: RJ50 (cradle) to M12 male connector<br>Cable: coiled; 3,8m length<br>Protocol: USB<br>Compatible with IDM-Zx-x61-B-J1* base station  | Coiled<br>3,8 m length   |   |
| #548376     | DATL-IDM-DB-S-XX00-N0    | Connector cable for wired 1D Scanner IDM-Z1-160-D-1D-J1-S-* (S3-Interface required) and 2D Scanner IDM-Z2-260-D-2D-J1-S* (S4-interface required) compatible with Housing AG-XX00-* and AG1<br>- 4-wire with ferrules<br>- IDM Scanner connection via M12-connector<br>- Note: Supports only RS232 Scanner/Basestation | 1,0 m length             |  |

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**Serial extension cables**

| Item Number | Product Name              | Description   | Cable                  | Photo   |
|-------------|---------------------------|---|------------------------|---|
| #548356     | CBL-IDMx6x-DB-J1-S-C30-N0 | Serial extension cable<br>Ex-protection: suitable for Zone 1/21 & Zone 2/22<br>Interface: M12 female socket to M12 male connector<br>Protocol: serial | Coiled<br>3 m length   |  |
| #548357     | CBL-IDMx6x-DB-J1-S-C60-N0 | Serial extension cable<br>Ex-protection: suitable for Zone 1/21 & Zone 2/22<br>Interface: M12 female socket to M12 male connector<br>Protocol: serial | Coiled<br>6 m length   |   |
| #548365     | CBL-IDMx6x-DB-J1-S-S30-N0 | Serial extension cable<br>Ex-protection: suitable for Zone 1/21 & Zone 2/22<br>Interface: M12 female socket to M12 male connector<br>Protocol: serial | Straight<br>3 m length |  |
| #548355     | CBL-IDMx6x-DB-J1-S-S60-N0 | Serial extension cable<br>Ex-protection: suitable for Zone 1/21 & Zone 2/22<br>Interface: M12 female socket to M12 male connector<br>Protocol: serial | Straight<br>6 m length |   |

**Cable accessories**

| Item Number | Product Name    | Description  | Cable       |
|-------------|-----------------|--|-------------|
| #548379     | S-RN2/DB9-5-N0  | RS232 cable with SUB-D9 plug (female) and open cable ends with wire end ferrules   | 5 m length  |
| #548380     | S-RN2/DB9-20-N0 | RS232 cable with SUB-D9 plug (female) and open cable ends with wire end ferrules   | 20 m length |
| #193077     | DATL-A3-1.5-1   | Supply line for 90 – 240 VAC supply<br>3 x 1.5 mm <sup>2</sup> , diameter 8.1 mm<br>Assembly 6 x 1.5 mm <sup>2</sup> wire end ferrules |             |

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**Corded Handheld Reader Accessories for VisuNet HMI Applications**

| Ex-protection: ATEX&IECEx Zone 1/21 |                               |   |   |
|-------------------------------------|-------------------------------|---|---|
| Item number                         | Product name                  | Description   | Photo   |
| #70115393                           | SK-IDM-Z1-160-BD-1D-J1-DC-S-N | Barrier for corded 1D reader & base station<br>Input: 24 V DC<br>Protocol: RS-232/422/485 Ex e (to host device)<br>Compatible with IDM-Z1-160-D-1D-J1* and IDM-Z1-x61-B-J1* with serial connection cables<br>incl. short setup cable with M12 female socket |  |
| #70115394                           | SK-IDM-Z1-160-BD-1D-J1-DC-U-N | Barrier for corded 1D reader & base station<br>Input: 24 V DC<br>Protocol: USB Ex e (to host device)<br>Compatible with IDM-Z1-160-D-1D-J1* and IDM-Z1-x61-B-J1* with USB connection cables<br>incl. short setup cable with M12 female socket               |   |
| #70115395                           | SK-IDM-Z1-160-BD-1D-J1-AC-S-N | Barrier for corded 1D reader & base station<br>Input: 24 V DC<br>Protocol: RS-232/422/485 Ex e (to host device)<br>Compatible with IDM-Z1-160-D-1D-J1* and IDM-Z1-x61-B-J1* with serial connection cables<br>incl. short setup cable with M12 female socket |   |
| #70115396                           | SK-IDM-Z1-160-BD-1D-J1-AC-U-N | Barrier for corded 1D reader & base station<br>Input: 230 V AC<br>Protocol: USB Ex e (to host device)<br>Compatible with IDM-Z1-160-D-1D-J1* and IDM-Z1-x61-B-J1* with USB connection cables<br>incl. short setup cable with M12 female socket              |   |

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