



# IDM241E-411S

IDM

MOBILE HANDHELD SCANNERS

**SICK**  
Sensor Intelligence.



## Ordering information

| Type         | part no. |
|--------------|----------|
| IDM241E-411S | 6086915  |

**Included in delivery:** Supercapacitor (1)

Other models and accessories → [www.sick.com/IDM](http://www.sick.com/IDM)



## Detailed technical data

### Features

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>        | Standard application                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Description</b>        | The cable-free IDM241E-411S incl. UltraCap™ supercapacitor serves as the batteryless voltage supply. The UltraCap™ supercapacitor is characterized by its long service life and thereby lowers the operating costs of the mobile handheld scanner. At the same time, it produces less electronic waste than battery-operated devices. The cable-free IDM241E-411S incl. UltraCap™ supercapacitor is not a hazardous good and is therefore unproblematic to ship. Moreover, the supercapacitor is easy to replace. |
| <b>Scanner design</b>     | Wireless variant                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Sensor resolution</b>  | 1,280 px x 800 px                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Light source</b>       | LED, Visible, Red, 660 nm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Alignment aid</b>      | LED, green, 660 nm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Reading distance</b>   | 30 mm ... 400 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Scanning frequency</b> | 60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Code resolution</b>    | ≥ 0.07 mm <sup>1)</sup><br>≥ 0.13 mm <sup>2)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

<sup>1)</sup> Valid for Code 39.

<sup>2)</sup> Valid for Data Matrix code.

### Mechanics/electronics

|                               |                                                                         |
|-------------------------------|-------------------------------------------------------------------------|
| <b>Supply voltage</b>         | 5 V DC, ± 5 %                                                           |
| <b>Current consumption</b>    | Operation (charge status incl. base station): 750 mA<br>Standby: 175 mA |
| <b>Housing color</b>          | Black, Gray                                                             |
| <b>Enclosure rating</b>       | IP52                                                                    |
| <b>Weight</b>                 | 208 g, Incl. rechargeable battery (UltraCap™)                           |
| <b>Dimensions (L x W x H)</b> | 94 mm x 71 mm x 160 mm                                                  |
| <b>MTBF</b>                   | 100,000 h                                                               |

## Performance

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Readable code structures</b> | 1D codes, 2D codes, Stacked                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Bar code types</b>           | Code 39, Code 39 Full ASCII, Code 32, Code 128, GS1-128, Codabar, Code 11, Code 93, GS1 DataBar, Standard and Industrial 2 of 5, Interleaved & Matrix 2 of 5, IATA, UPC / EAN / JAN, UPC / EAN / JAN (with addition), Telepen, MSI/Plessey, UK/Plessey, Australian Post, China Post, German Post, US Planet, US Postnet, British Post, Intelligent Mail, Japan Post, Korea Post, Dutch KIX Post, Posi LAPA 4 State Code |
| <b>2D code types</b>            | Data Matrix, MaxiCode, QR code, Aztec, MicroQR-Code, GS1 QR code, GS1 Data-Matrix                                                                                                                                                                                                                                                                                                                                       |
| <b>Stacked code types</b>       | PDF417, MicroPDF417, Code 49, Code 16K, Composite, Codablock F                                                                                                                                                                                                                                                                                                                                                          |
| <b>Battery power</b>            | UltraCap™: Over 4,200 scans when fully charged                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Code buffer</b>              | 5,000 Codes (EAN, for scanning in batch mode), 100,000 Codes (EAN, for out of range scanning)                                                                                                                                                                                                                                                                                                                           |

## Interfaces

|                               |                                                                                                                                                               |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ethernet</b>               | ✓                                                                                                                                                             |
| Type of fieldbus integration  | Optional, over external connection module CDF600-2                                                                                                            |
| <b>PROFINET</b>               | ✓                                                                                                                                                             |
| Type of fieldbus integration  | Optional over external fieldbus module CDF600-2                                                                                                               |
| Function                      | PROFINET Single Port, PROFINET Dual Port                                                                                                                      |
| <b>EtherCAT®</b>              | ✓                                                                                                                                                             |
| Type of fieldbus integration  | Optional over external fieldbus module CDF600                                                                                                                 |
| <b>Serial</b>                 | ✓ , RS-232                                                                                                                                                    |
| <b>PROFIBUS DP</b>            | ✓                                                                                                                                                             |
| Type of fieldbus integration  | Optional over external fieldbus module CDF600-2                                                                                                               |
| <b>USB</b>                    | ✓                                                                                                                                                             |
| Function                      | Keyboard wedge, COM-Port emulation                                                                                                                            |
| <b>Bluetooth</b>              | ✓                                                                                                                                                             |
| Remark                        | Bluetooth™ V4.0, 2.402 ... 2.4830 GHz                                                                                                                         |
| Function                      | Wireless operating range up to 100 m (free view), batch function for expansion of the wireless radius, up to seven scanners communicate with one base station |
| <b>Optical indicators</b>     | 2 LEDs (good read, charge of battery , radio connection status)                                                                                               |
| <b>Acoustic indicators</b>    | Beeper, can be switched off                                                                                                                                   |
| <b>Vibration</b>              | No                                                                                                                                                            |
| <b>Configuration software</b> | IDM Setup Tool                                                                                                                                                |

## Ambient data

|                                      |                                        |
|--------------------------------------|----------------------------------------|
| <b>Shock resistance</b>              | 25 drops from 1.8 m height on concrete |
| <b>Ambient operating temperature</b> | -10 °C ... +50 °C                      |
| <b>Storage temperature</b>           | -40 °C ... +70 °C                      |
| <b>Permissible relative humidity</b> | 95 %, Non-condensing                   |
| <b>Ambient light immunity</b>        | 100,000 lx                             |

## General notes

|                       |                                                                                                                                                               |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Items supplied</b> | The rechargeable battery is included with delivery                                                                                                            |
| <b>Note</b>           | A base station, a connecting cable, and possibly also a power supply unit are required for commissioning.<br>Not free of paint wetting impairment substances. |

## Certificates

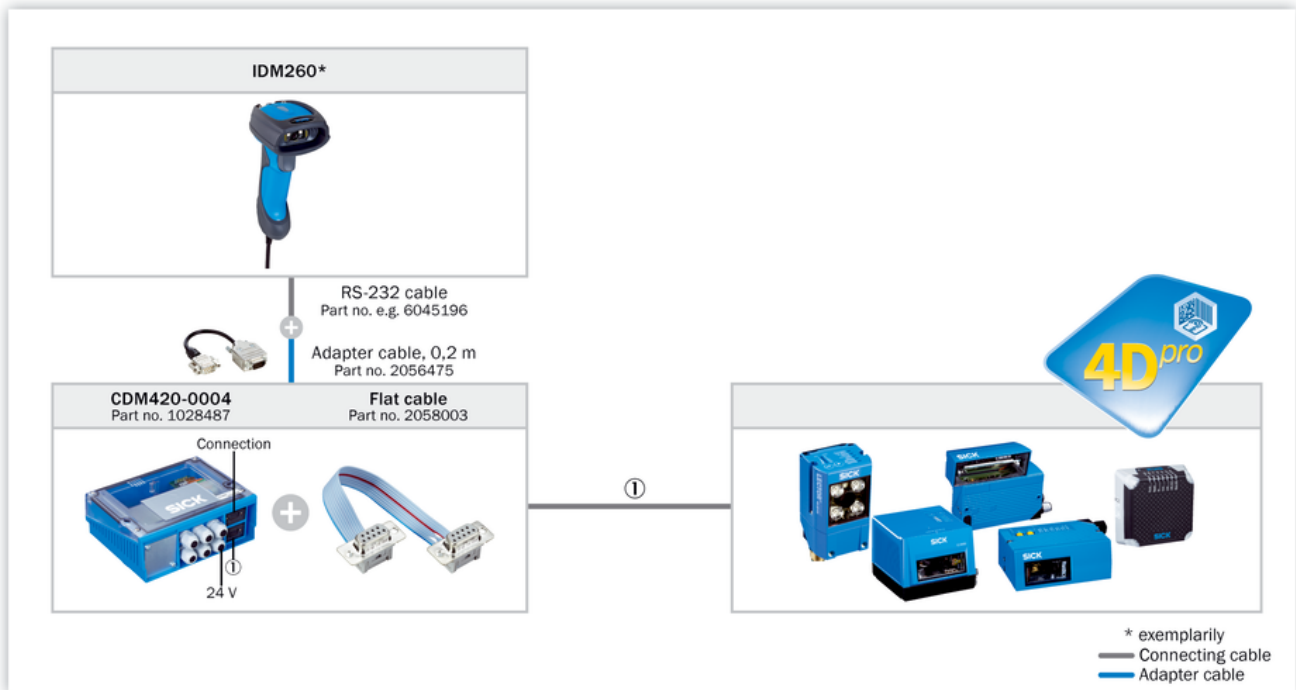
|                                                                              |   |
|------------------------------------------------------------------------------|---|
| <b>EU declaration of conformity</b>                                          | ✓ |
| <b>UK declaration of conformity</b>                                          | ✓ |
| <b>ACMA declaration of conformity</b>                                        | ✓ |
| <b>China RoHS</b>                                                            | ✓ |
| <b>Dangerous Goods Certificate Capacitor</b>                                 | ✓ |
| <b>Information according to Art. 3 of Data Act (Regulation EU 2023/2854)</b> | ✓ |
| <b>Bluetooth</b>                                                             | ✓ |

## Classifications

|                       |          |
|-----------------------|----------|
| <b>ECLASS 5.0</b>     | 27280101 |
| <b>ECLASS 5.1.4</b>   | 27280101 |
| <b>ECLASS 6.0</b>     | 27280101 |
| <b>ECLASS 6.2</b>     | 27280101 |
| <b>ECLASS 7.0</b>     | 27280101 |
| <b>ECLASS 8.0</b>     | 27280101 |
| <b>ECLASS 8.1</b>     | 27280101 |
| <b>ECLASS 9.0</b>     | 27280101 |
| <b>ECLASS 10.0</b>    | 27280101 |
| <b>ECLASS 11.0</b>    | 27280101 |
| <b>ECLASS 12.0</b>    | 27280101 |
| <b>ETIM 5.0</b>       | EC002550 |
| <b>ETIM 6.0</b>       | EC002550 |
| <b>ETIM 7.0</b>       | EC002550 |
| <b>ETIM 8.0</b>       | EC002550 |
| <b>UNSPSC 16.0901</b> | 43211701 |

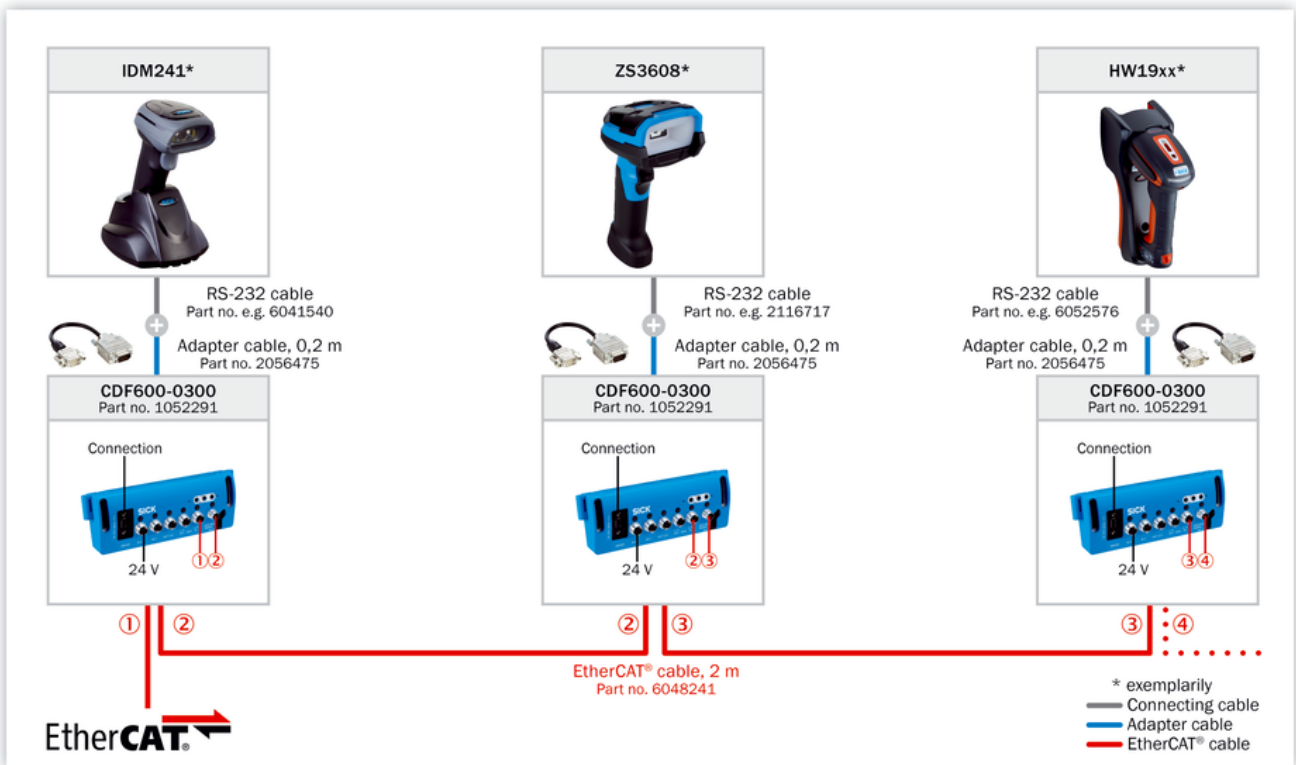
## Connection diagram AUX looping

### Looping-in via AUX



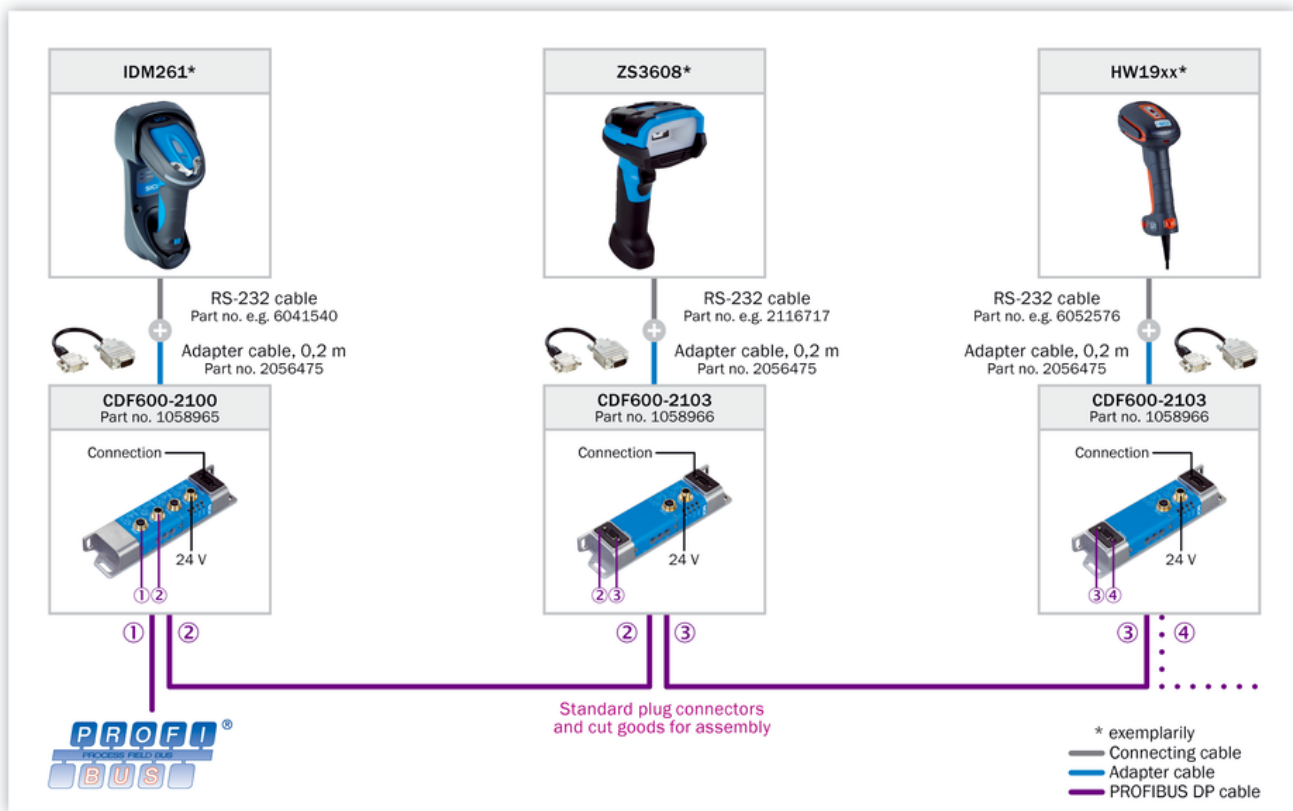
## Connection diagram EtherCAT®

EtherCAT®



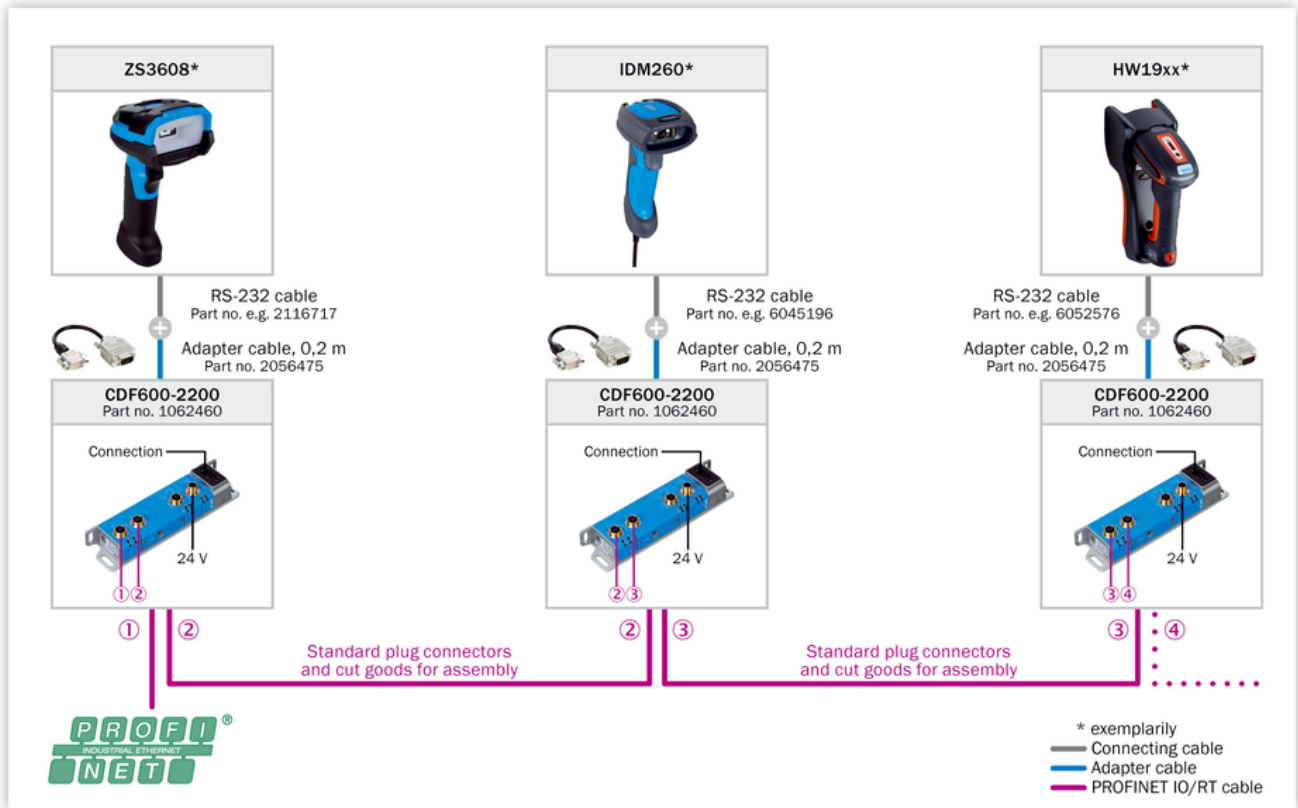
## Connection diagram PROFIBUS DP

### PROFIBUS DP



## Connection diagram PROFINET IO/RT

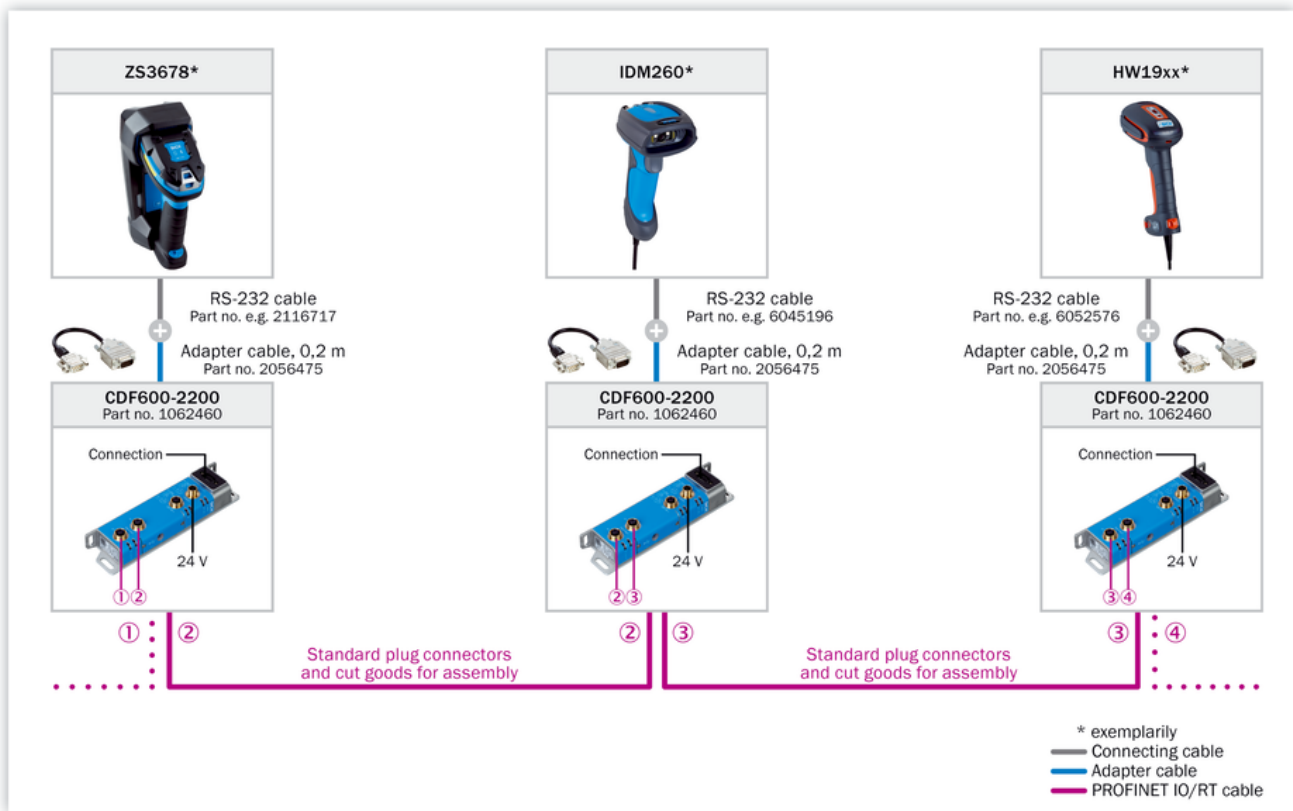
### PROFINET IO/RT





## Connection diagram Ethernet TCP/IP

### Ethernet TCP/IP



## Selection Guide



\*) For EtherNet/IP third party gateway is required from e.g. Control or HMS (requires local sourcing).

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)