





### Ordering information

Type	part no.
IDM161E-411S	6086914

**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>	Industrial application
<b>Description</b>	The cable-free IDM161E-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 IDM161E-411S incl. UltraCap™ supercapacitor is not a hazardous good and is therefore unproblematic to ship. Moreover, the supercapacitor is easy to replace.
<b>Version</b>	Standard Range
<b>Scanner design</b>	Wireless variant
<b>Light source</b>	LED, Visible, Red, 630 nm
<b>Reading distance</b>	20 mm ... 850 mm
<b>Scanning frequency</b>	≤ 500 Hz
<b>Code resolution</b>	≥ 0.076 mm

#### Mechanics/electronics

<b>Supply voltage</b>	3.7 V DC <sup>1)</sup>
<b>Current consumption</b>	Operation: 180 mA Standby: 80 mA
<b>Housing color</b>	Blue, gray
<b>Enclosure rating</b>	IP65
<b>Weight</b>	208 g, Incl. rechargeable battery (UltraCap™)
<b>Dimensions (L x W x H)</b>	104 mm x 76.3 mm x 176 mm

<sup>1)</sup> Rechargeable battery operation.

#### Performance

<b>Readable code structures</b>	1D 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>Stacked code types</b>	PDF417, MicroPDF417, Composite Code
<b>Battery power</b>	UltraCap™: Over 4,200 scans when fully charged
<b>Code buffer</b>	80,000 Codes (EAN)

## Interfaces

<b>Ethernet</b>	✓ , TCP/IP
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 TTL
<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>	Yes
<b>Configuration software</b>	IDM Setup Tool

## Ambient data

<b>Shock resistance</b>	50 drops from 2 m height on concrete
<b>Ambient operating temperature</b>	-20 °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. 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>	✓

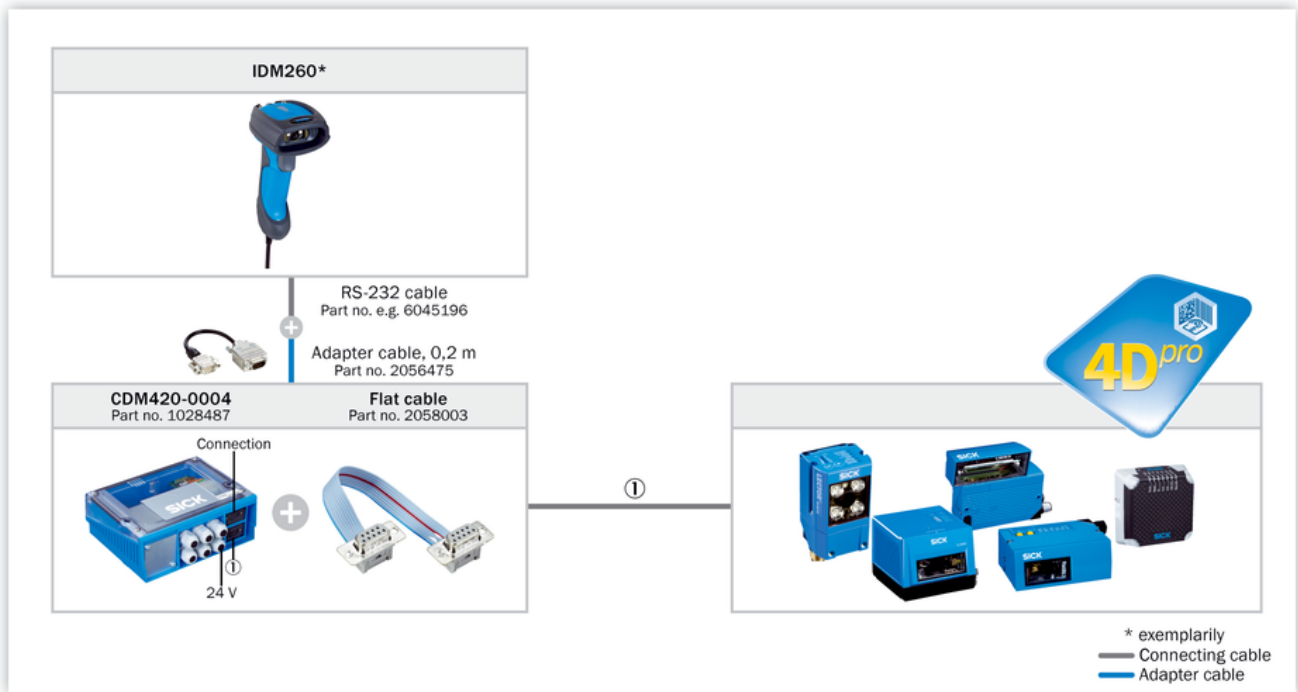
<b>Dangerous Goods Certificate Capacitor</b>	✓
<b>Information according to Art. 3 of Data Act (Regulation EU 2023/2854)</b>	✓
<b>Bluetooth</b>	✓

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



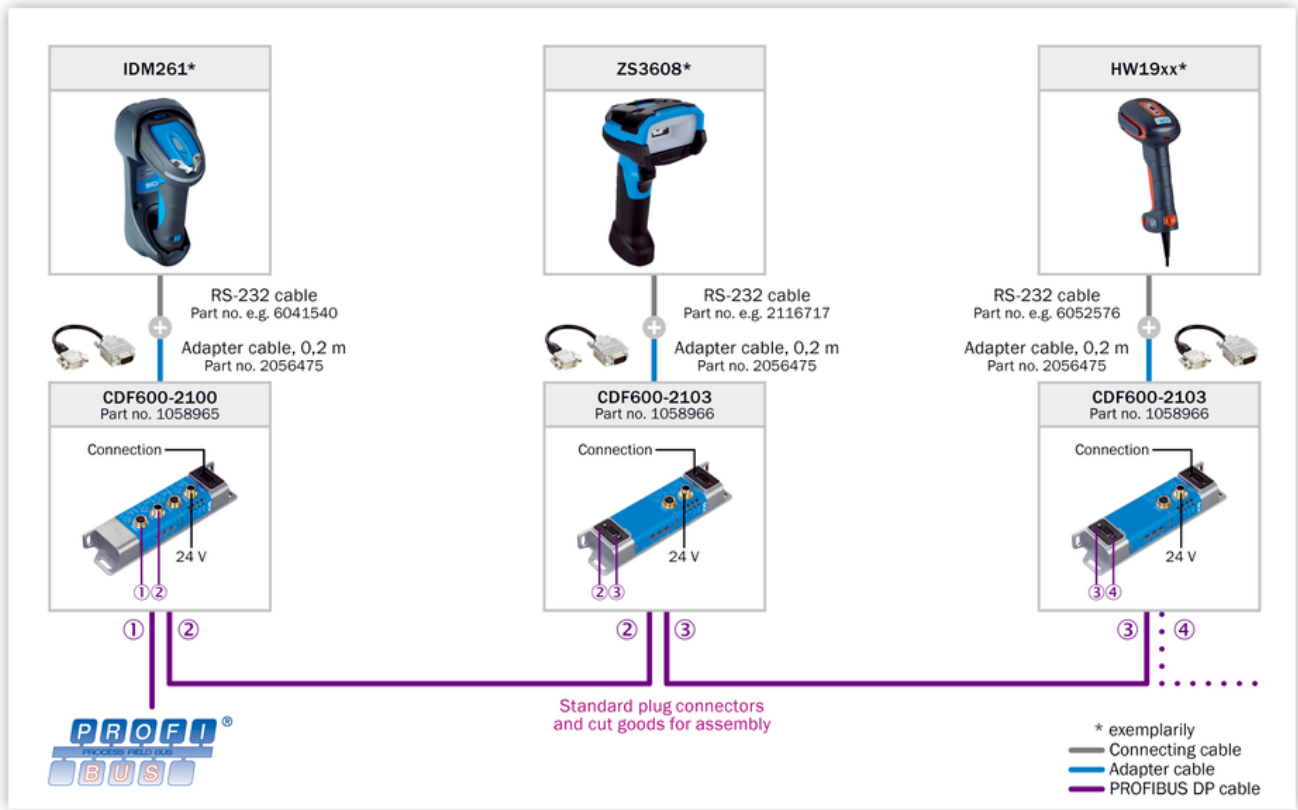
Connection diagram EtherCAT<sup>®</sup>

EtherCAT<sup>®</sup>



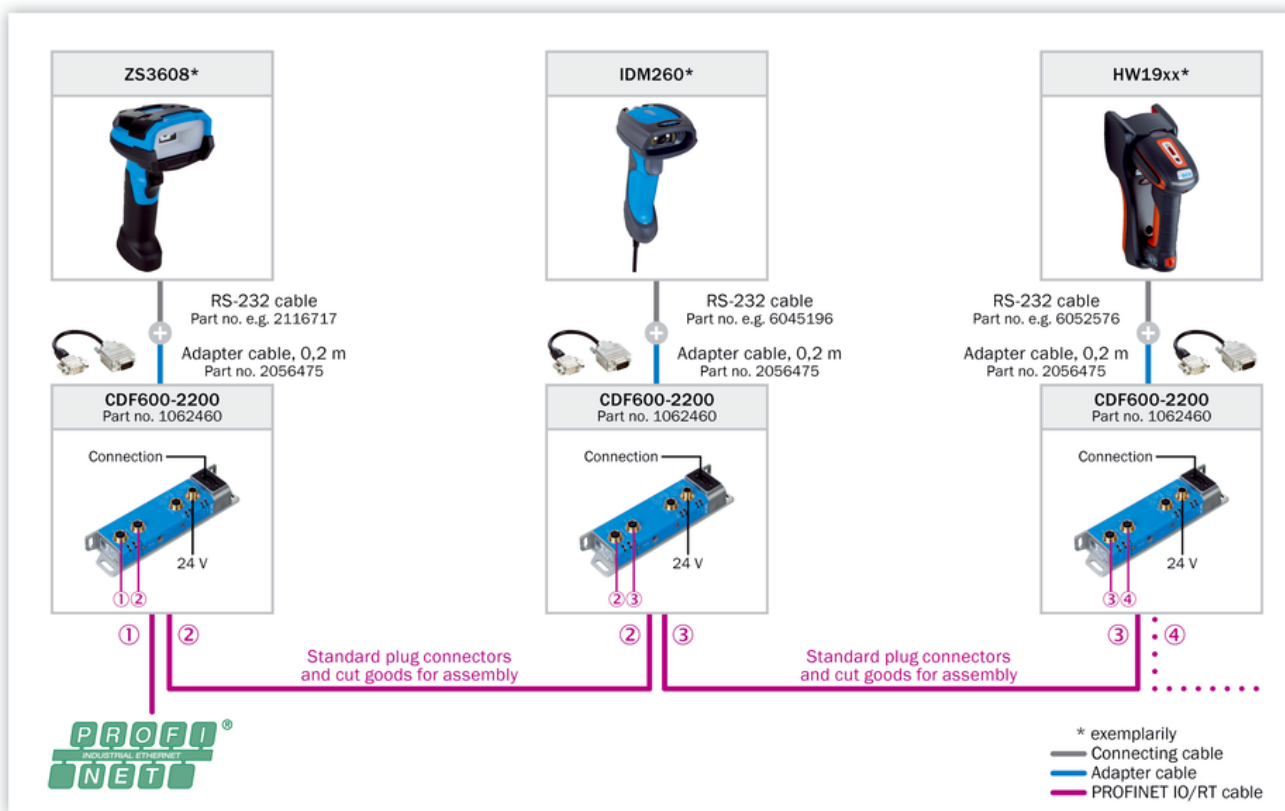
Connection diagram PROFIBUS DP

PROFIBUS DP



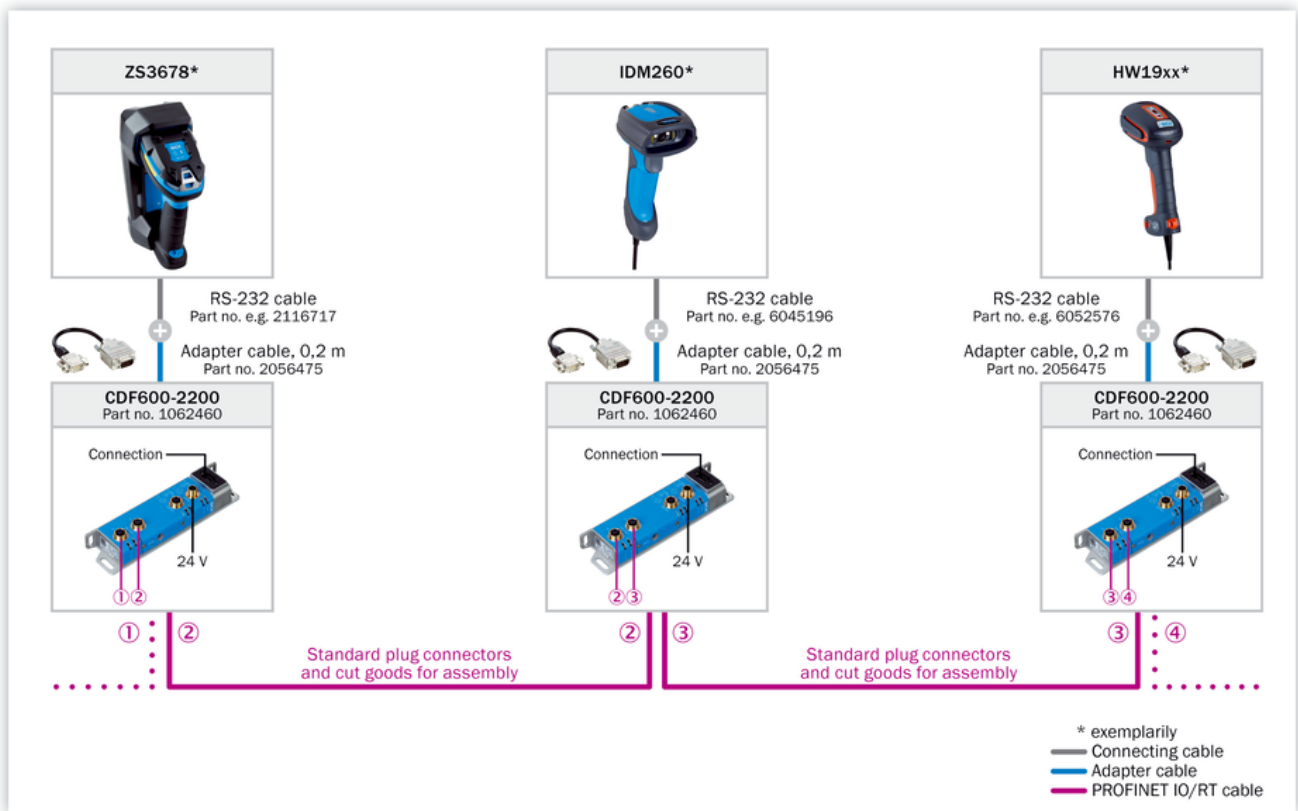
Connection diagram PROFINET IO/RT

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).

## Recommended accessories

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

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none"> <li><b>Connection type head A:</b> Male connector, D-Sub, 9-pin</li> <li><b>Connection type head B:</b> Male connector, D-Sub, 15-pin</li> <li><b>Items supplied:</b> Incl. 24V/5V DC converter</li> <li><b>Cable:</b> 0,3 m</li> <li><b>Note:</b> For handheld scanners to CDB620/CDM420/CDF600/CDF600-2, adapter AUX port</li> </ul>	YMH-DAC-C30XXMDSA9	2056475
integration modules and adapters			
	<ul style="list-style-type: none"> <li><b>Description:</b> Connection kit for connecting a hand-held scanner to a PROFINET (Siemens) interface</li> </ul>	Hand-held scanner PROFINET kit	1101488
Power supply units and power supply cables			
	<ul style="list-style-type: none"> <li><b>Input voltage:</b> 100 V AC ... 240 V AC</li> <li><b>Output voltage:</b> 5 V DC</li> <li><b>Output current:</b> 2 A</li> <li><b>Description:</b> Power supply, input AC 100 ... 240 V, output DC 5 V/2 A (necessary when using RS-232 TTL cable, does not fulfill medical standard EN 60601/ IEC 60601)</li> </ul>	Power supply unit	6036722
rechargeable batteries and base stations			
	<ul style="list-style-type: none"> <li><b>Enclosure rating:</b> IP40</li> <li><b>Description:</b> Wireless base station, supply voltage 5 V DC, current consumption max. 750 mA, interface: RS-232 True, USB</li> </ul>	Base station	6080756

## 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)