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DATA SHEET

IDM161E-411S

IDM
Mobile handheld scanners

SICK Sensor Intelligence

MOBILE HANDHELD SCANNERS

IDM161E-411S

ORDERING INFORMATION

Type	part no.
IDM161E-411S	6086914

Further device versions and accessories at www.sick.com/IDM



DETAILED TECHNICAL DATA

FEATURES

Application	Industrial application
Description	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.
Version	Standard Range
Scanner design	Wireless variant
Light source	LED, Visible, Red, 630 nm
Reading distance	20 mm ... 850 mm
Scanning frequency	≤ 500 Hz
Code resolution	≥ 0.076 mm

MECHANICS/ELECTRONICS

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

¹⁾ Rechargeable battery operation.

PERFORMANCE

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

INTERFACES

Ethernet	✓, TCP/IP
Type of fieldbus integration	Optional, over external connection module CDF600-2
PROFINET	✓
Type of fieldbus integration	Optional over external fieldbus module CDF600-2
Function	PROFINET Single Port, PROFINET Dual Port
EtherCAT®	✓
Type of fieldbus integration	Optional over external fieldbus module CDF600
Serial	✓, RS-232 TTL
PROFIBUS DP	✓
Type of fieldbus integration	Optional over external fieldbus module CDF600-2
USB	✓
Function	Keyboard wedge, COM-Port emulation
Bluetooth	✓
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
Optical indicators	2 LEDs (good read, charge of battery, radio connection status)
Acoustic indicators	Beeper, can be switched off
Vibration	Yes
Configuration software	IDM Setup Tool

AMBIENT DATA

Shock resistance	50 drops from 2 m height on concrete
Ambient operating temperature	-20 °C ... +50 °C
Storage temperature	-40 °C ... +70 °C
Relative humidity	± 95 %, Non-condensing
Ambient light immunity	100,000 lx

GENERAL NOTES

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

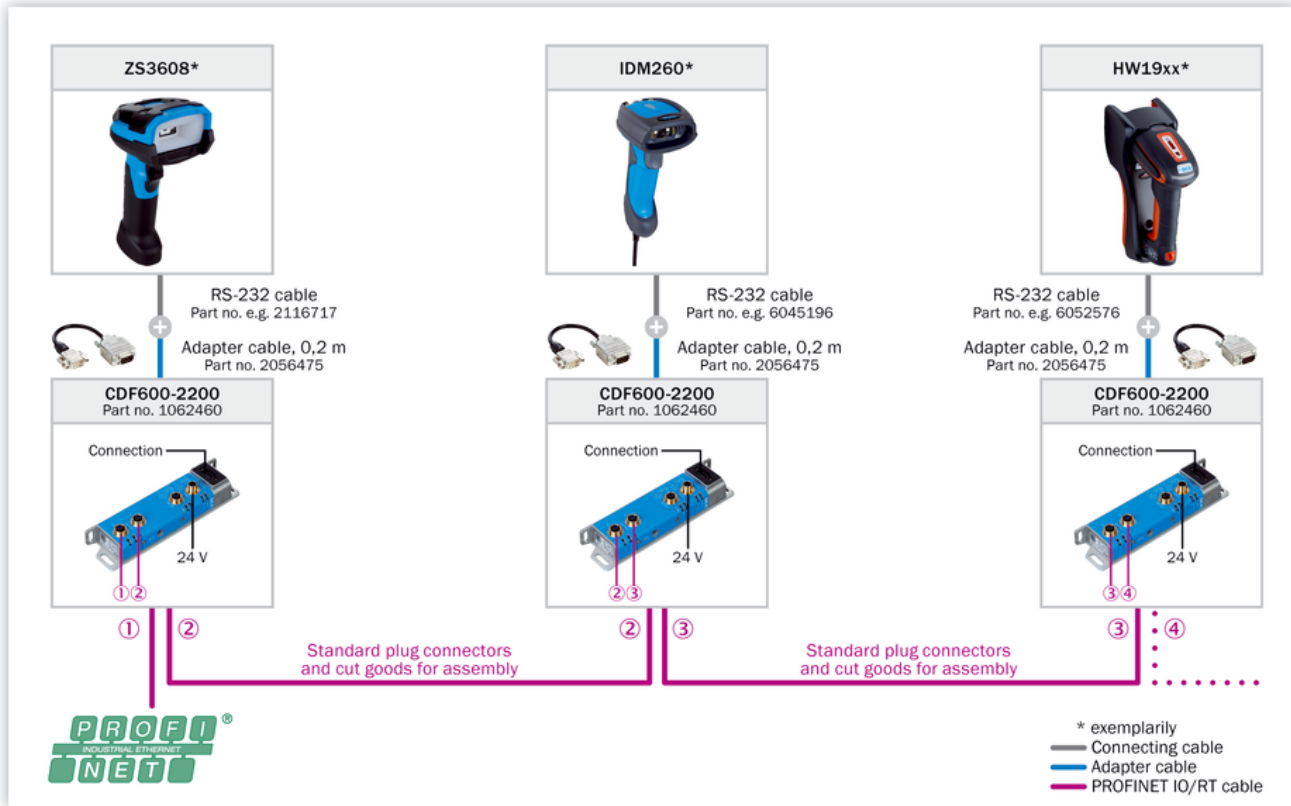
CERTIFICATES

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓

China RoHS	✓
Dangerous Goods Certificate Capacitor	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

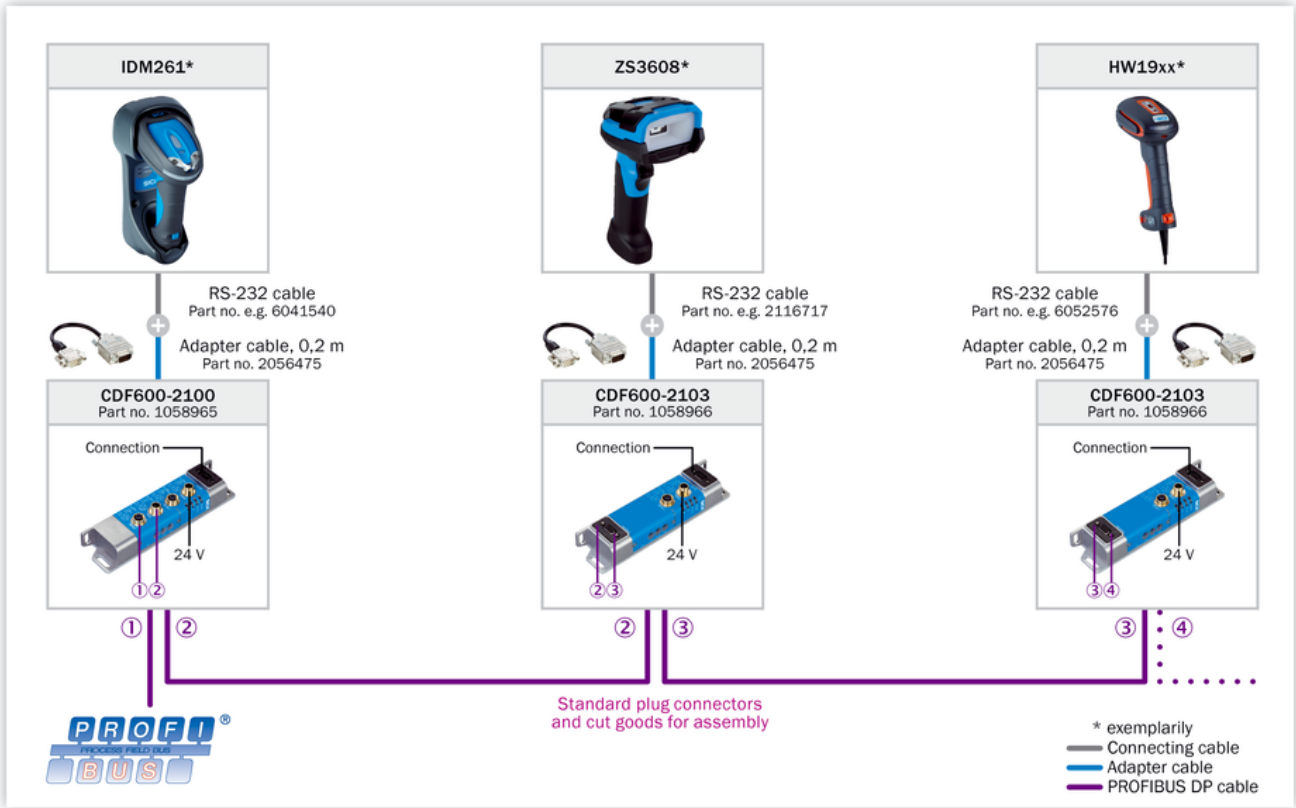
CONNECTION DIAGRAM PROFINET IO/RT

PROFINET IO/RT



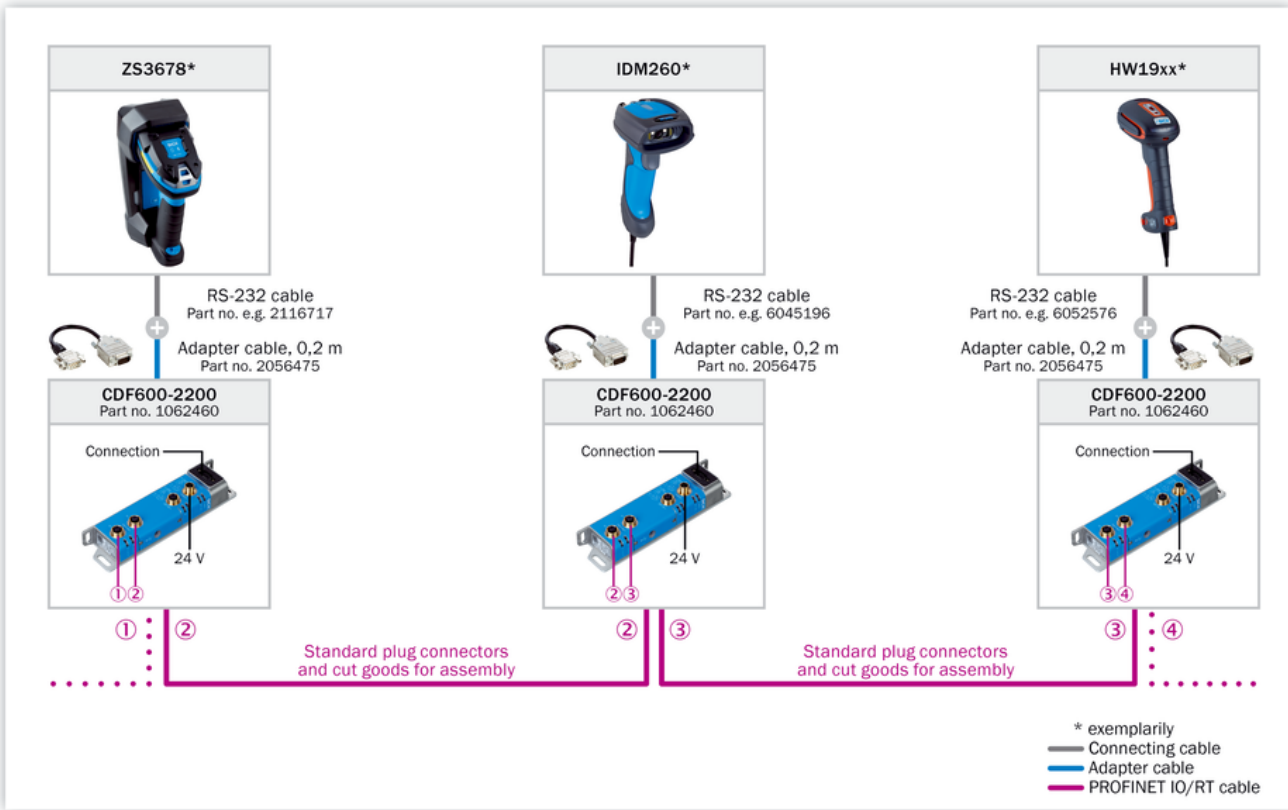
CONNECTION DIAGRAM PROFIBUS DP

PROFIBUS DP



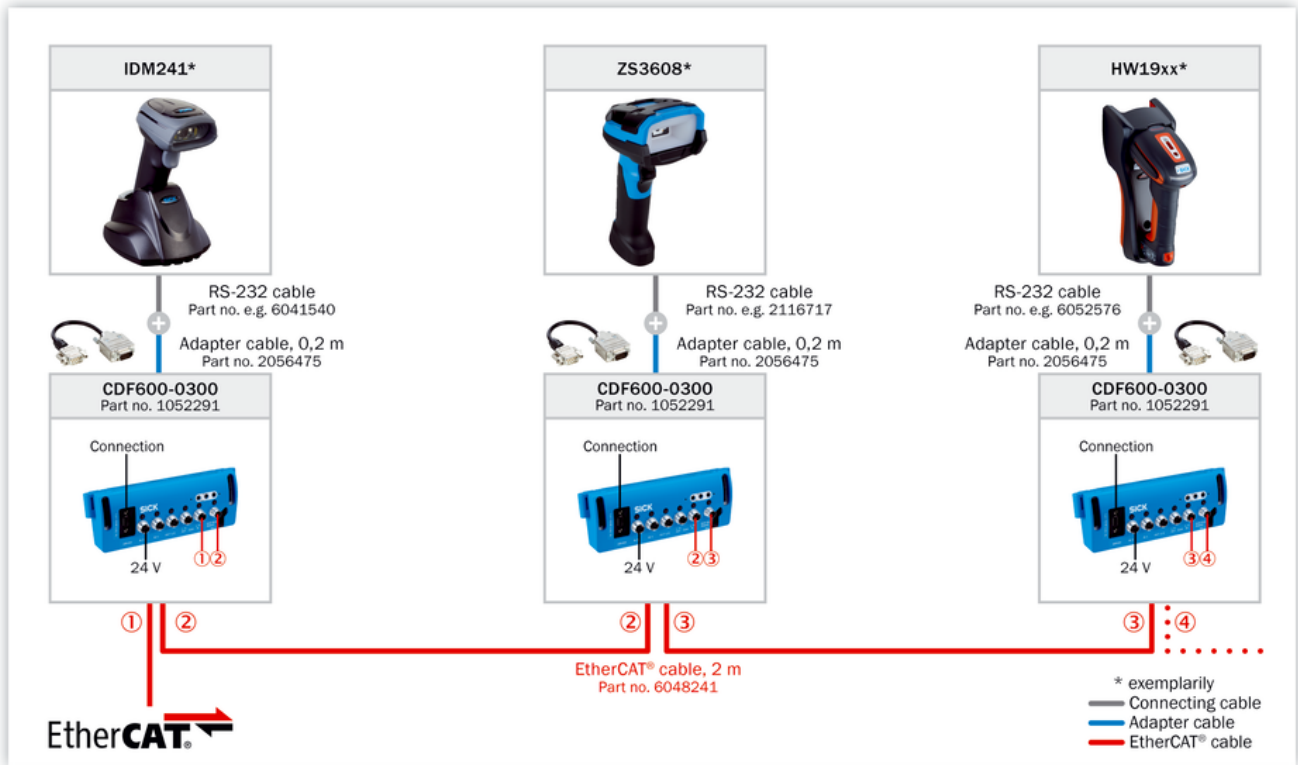
CONNECTION DIAGRAM ETHERNET TCP/IP

Ethernet TCP/IP



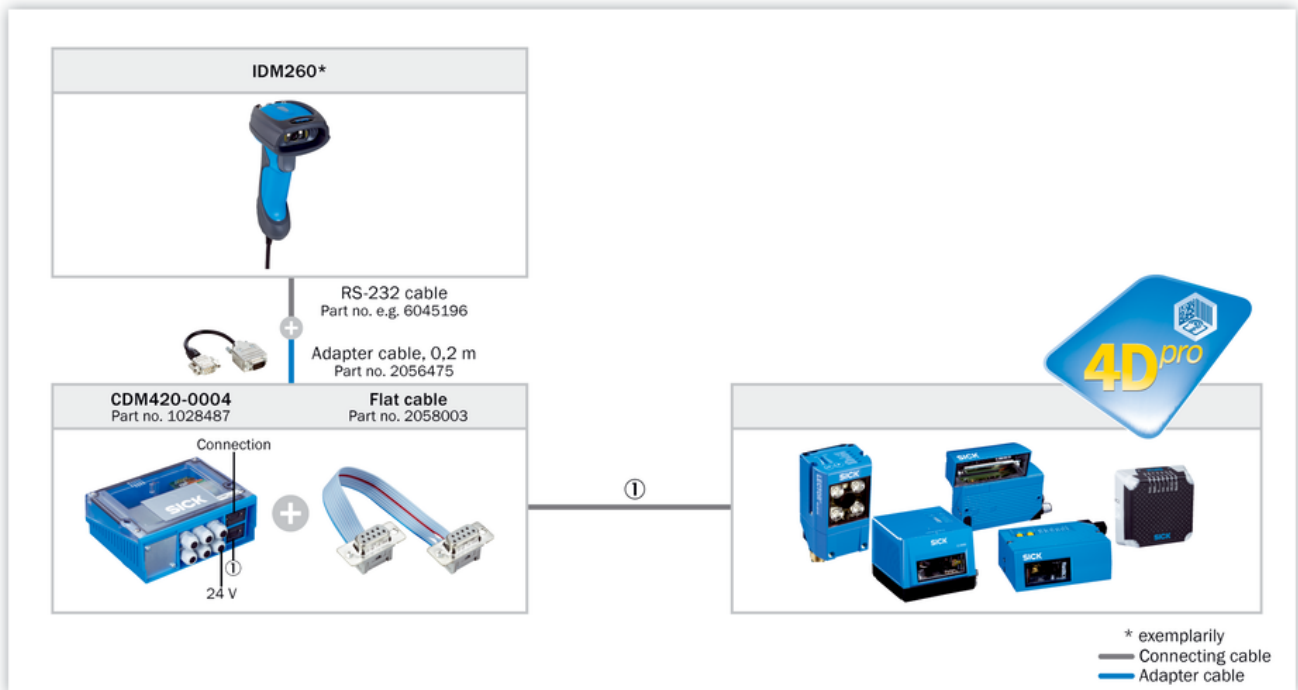
CONNECTION DIAGRAM ETHERCAT®

EtherCAT®



CONNECTION DIAGRAM AUX LOOPING

Looping-in via AUX



SELECTION GUIDE



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

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/6086914



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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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