



# HW1981IFR-3

HW19

MOBILE HANDHELD SCANNERS

**SICK**  
Sensor Intelligence.



## Ordering information

Type	part no.
HW1981IFR-3	6067058

Other models and accessories → [www.sick.com/HW19](http://www.sick.com/HW19)

## Detailed technical data

### Features

<b>Application</b>	Industrial application
<b>Version</b>	Full Range Focus
<b>Scanner design</b>	Wireless variant
<b>Sensor resolution</b>	1,280 px x 800 px
<b>Light source</b>	LED, Visible, Red, 624 nm, ± 18 nm
<b>Alignment aid</b>	Laser, Red, 650 nm
<b>Reading distance</b>	150 mm ... 16,000 mm
<b>Code resolution</b>	≥ 0.05 mm <sup>1)</sup> ≥ 2 mm <sup>2)</sup>

<sup>1)</sup> Close range.

<sup>2)</sup> Distance range.

### Mechanics/electronics

<b>Supply voltage</b>	3.7 V DC <sup>1)</sup>
<b>Current consumption</b>	Charging (5 V DC): 1 A Standby: 120 mA
<b>Housing material</b>	Plastic (UL 94 V-0)
<b>Housing color</b>	Orange, gray
<b>Enclosure rating</b>	IP65
<b>Weight</b>	420 g, incl. rechargeable battery
<b>Dimensions (L x W x H)</b>	133 mm x 75 mm x 195 mm

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

### Performance

<b>Readable code structures</b>	1D codes, 2D codes, Stacked
<b>Bar code types</b>	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
<b>2D code types</b>	Data Matrix, QR code, MicroQR-Code, Aztec, MaxiCode

<b>Stacked code types</b>	PDF417, MicroPDF417, Code 49, Code 16K, Composite, Codablock F
<b>Code alignment</b>	Omni-directional
<b>Battery power</b>	Min. 7,200 scans (1 scan every 4 s over 8 hours)
<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>	✓ , TCP/IP
Type of fieldbus integration	Optional over external fieldbus 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
Remark	RS-232 (± 12 V)
<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>PS/2</b>	✓
Function	Keyboard wedge
<b>Bluetooth</b>	✓
Remark	Bluetooth™ V2.1 EDR, 2.4 ... 2.4835 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>	EZConfig Tool

### Ambient data

<b>Shock resistance</b>	50 drop tests onto concrete from a height of 2 m at -30 °C
<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
<b>Bar code print contrast (PCS)</b>	≥ 40 %

### General notes

<b>Items supplied</b>	The rechargeable battery is included with delivery
<b>Note</b>	A base station, power supply unit, and connecting cable may be required for operation.

### Certificates

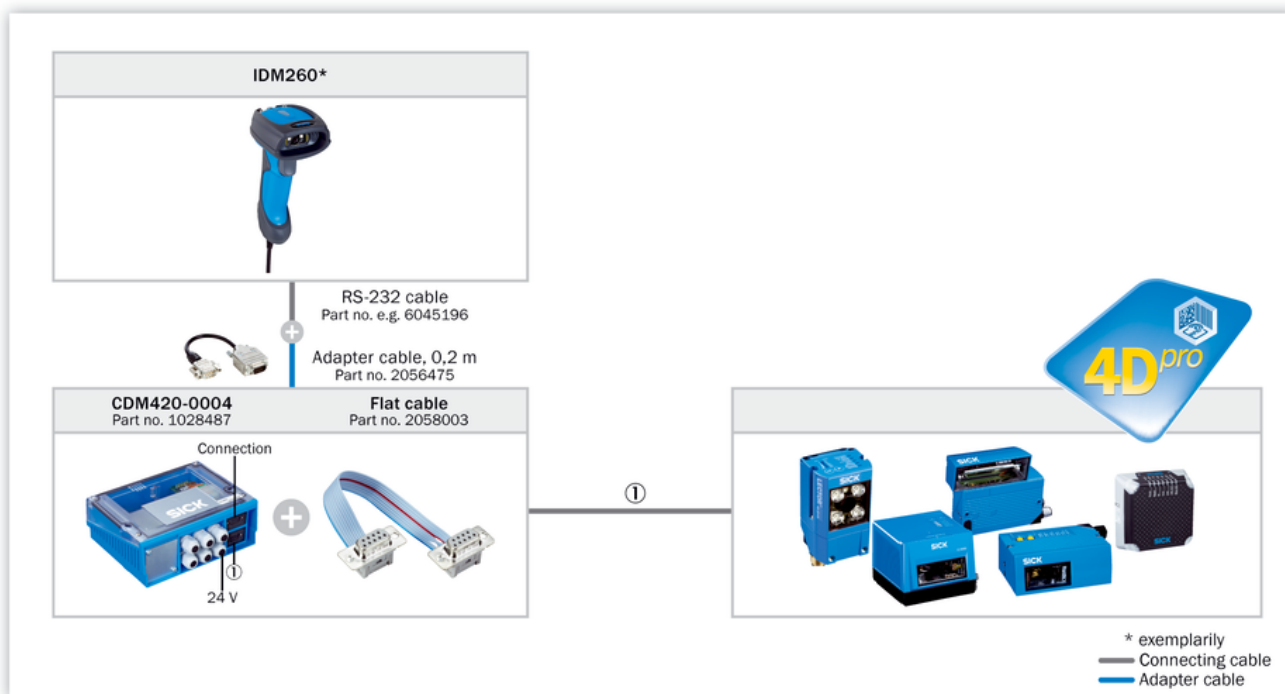
<b>UN38.3 Test Summary Report</b>	✓
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Classifications

<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

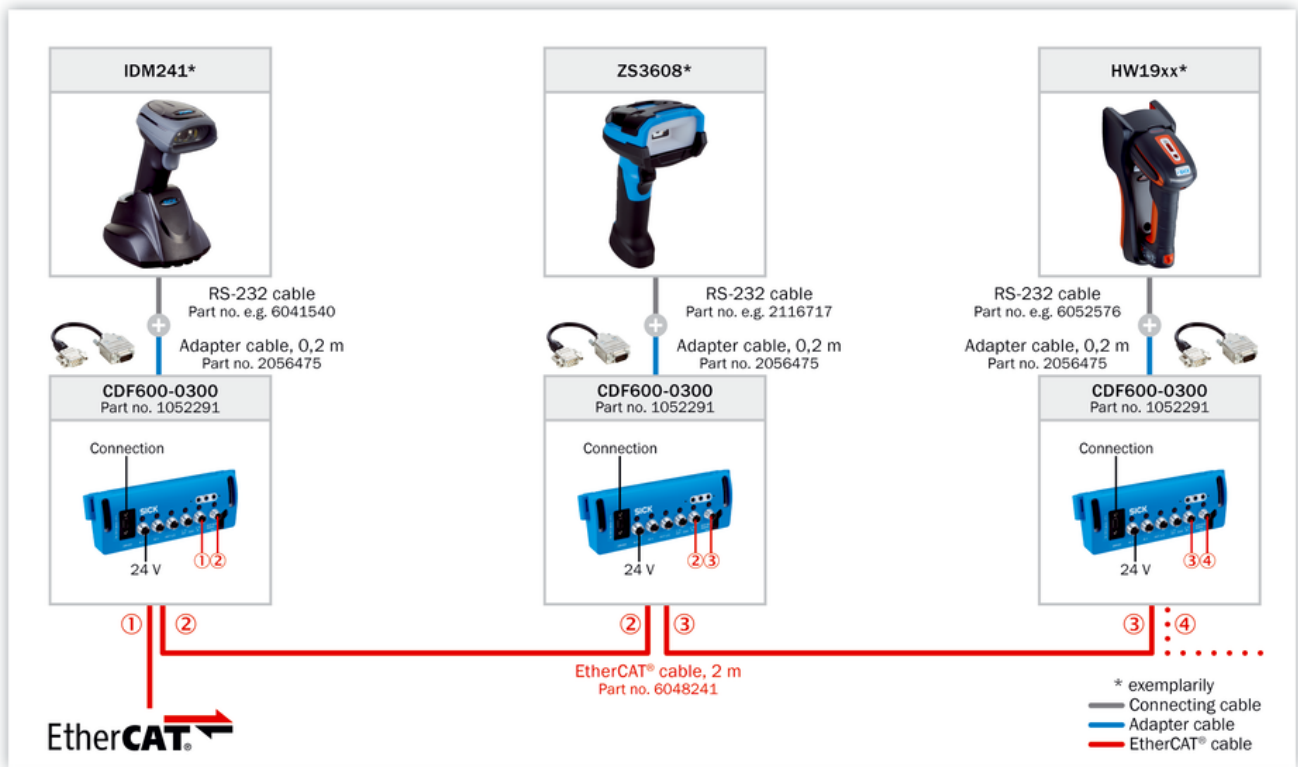
Connection diagram AUX looping

Looping-in via AUX



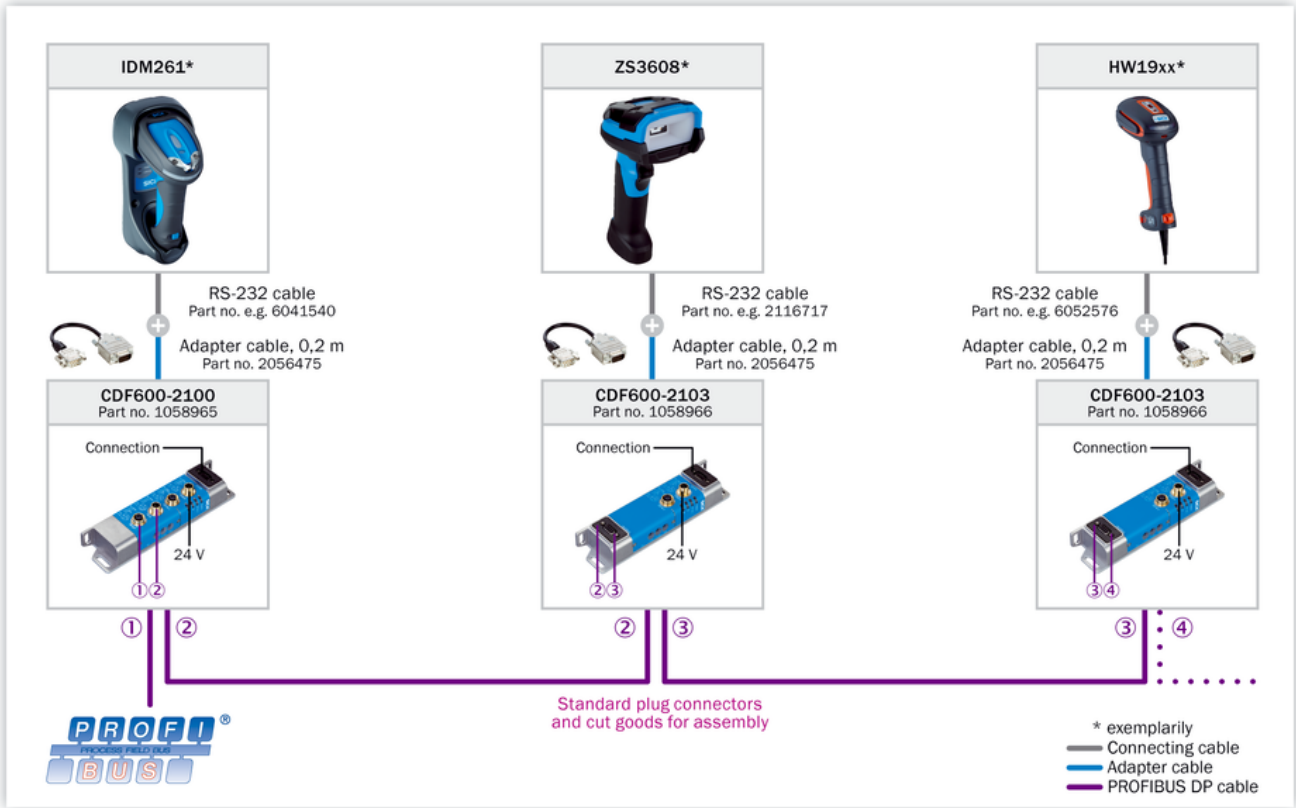
Connection diagram EtherCAT<sup>®</sup>

EtherCAT<sup>®</sup>



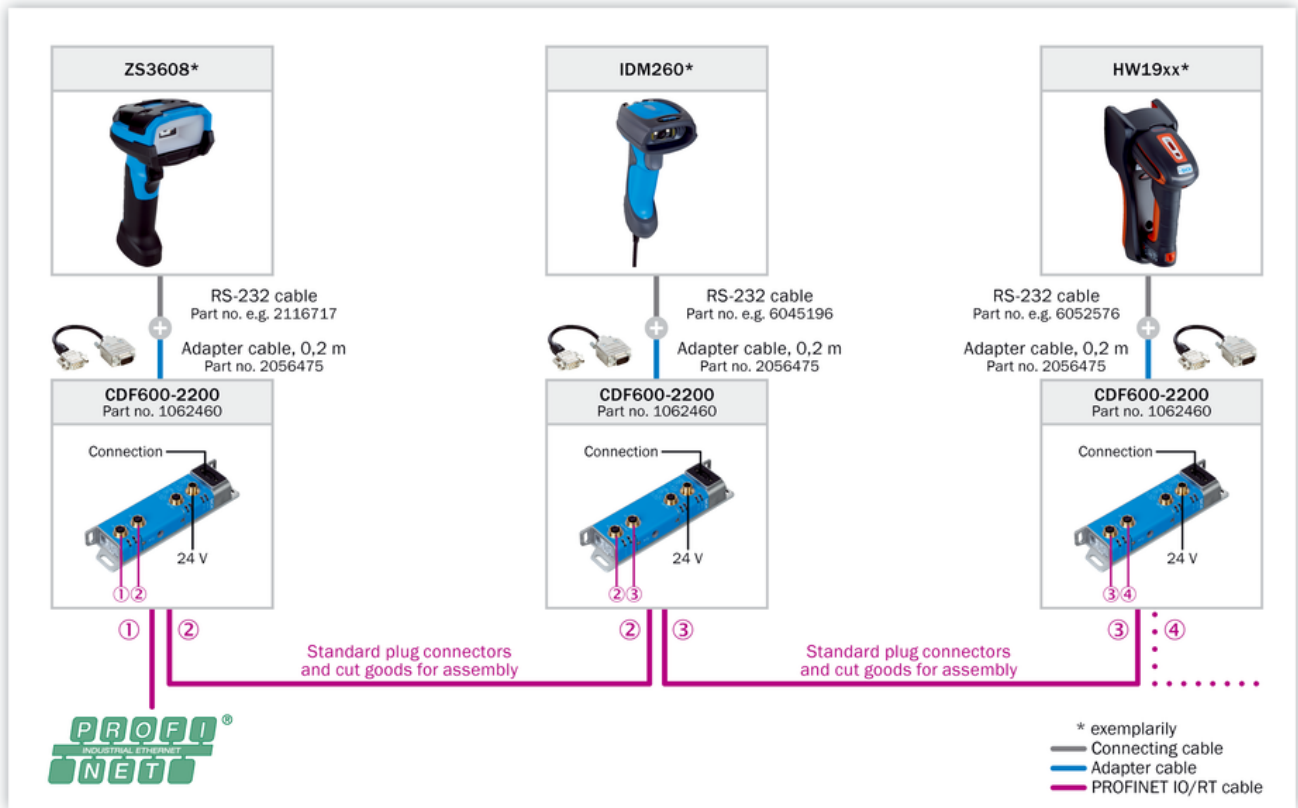
Connection diagram PROFIBUS DP

PROFIBUS DP



Connection diagram PROFINET IO/RT

PROFINET IO/RT



### 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/HW19](http://www.sick.com/HW19)

	Brief description	Type	part no.
rechargeable batteries and base stations			
	<ul style="list-style-type: none"> <li>• <b>Enclosure rating:</b> IP51</li> <li>• <b>Description:</b> Charging station for HW1981, Bluetooth class 1, 100 m, host interfaces: RS-232 / USB / KBW (Honeywell CCB05-100BT-07N)</li> </ul>	Base station	6067059
connectors and cables			
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, D-Sub, 9-pin, straight</li> <li>• <b>Connection type head B:</b> Male connector, RJ45</li> <li>• <b>Signal type:</b> RS-232 TTL</li> <li>• <b>Cable:</b> 3 m, coiled cable</li> <li>• <b>Description:</b> RS-232 TTL</li> </ul>	Connection cable (male connector-female connector)	6064034
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Male connector, USB-A</li> <li>• <b>Connection type head B:</b> Male connector, RJ45</li> <li>• <b>Signal type:</b> USB</li> <li>• <b>Cable:</b> 3 m, straightened cable</li> <li>• <b>Description:</b> USB</li> </ul>	USB cable	6064633
	<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-C30XXXMDSA9	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> 90 V AC ... 255 V AC</li> <li>• <b>Output voltage:</b> 5.2 V DC</li> <li>• <b>Output current:</b> 1 A</li> <li>• <b>Description:</b> Power supply unit with NA male connector for charging station, 1 A, 5.2 V DC, 90 V AC ... 255 V AC at 50 Hz ... 60 Hz (Honeywell PS-05-1000W-A)</li> </ul>	Power supply unit	6052582
	<ul style="list-style-type: none"> <li>• <b>Input voltage:</b> 90 V AC ... 255 V AC</li> <li>• <b>Output voltage:</b> 5.2 V DC</li> <li>• <b>Output current:</b> 1 A</li> <li>• <b>Description:</b> Power supply unit with EU male connector for charging station, 1 A, 5.2 V DC, 90 V AC ... 255 V AC at 50 Hz ... 60 Hz (Honeywell PS-05-1000W-C)</li> </ul>	Power supply unit	6064641
	<ul style="list-style-type: none"> <li>• <b>Input voltage:</b> 90 V AC ... 255 V AC</li> <li>• <b>Output voltage:</b> 5.2 V DC</li> <li>• <b>Output current:</b> 1 A</li> <li>• <b>Description:</b> Power supply unit with UK male connector for charging station, 1 A, 5.2 V DC, 90 V AC ... 255 V AC at 50 Hz ... 60 Hz (Honeywell PS-05-1000W-G)</li> </ul>	Power supply unit	6064642

## 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)