



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



Detailed technical data

Features

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

¹⁾ Close range.

²⁾ Distance range.

Mechanics/electronics

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

¹⁾ Rechargeable battery operation.

Performance

Readable code structures	1D codes, 2D codes, Stacked
Bar code 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
2D code types	Data Matrix, QR code, MicroQR-Code, Aztec, MaxiCode
Stacked code types	PDF417, MicroPDF417, Code 49, Code 16K, Composite, Codablock F
Code alignment	Omni-directional
Battery power	Min. 7,200 scans (1 scan every 4 s over 8 hours)
Code buffer	5,000 Codes (EAN, for scanning in batch mode), 100,000 Codes (EAN, for out of range scanning)

Interfaces

Ethernet	✓, TCP/IP
Type of fieldbus integration	Optional over external fieldbus 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
Remark	RS-232 (± 12 V)
PROFIBUS DP	✓
Type of fieldbus integration	Optional over external fieldbus module CDF600-2
USB	✓
Function	Keyboard wedge, COM-Port emulation
PS/2	✓
Function	Keyboard wedge
Bluetooth	✓
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
Optical indicators	2 LEDs (good read, charge of battery, radio connection status)
Acoustic indicators	Beeper, can be switched off
Vibration	Yes
Configuration software	EZConfig Tool

Ambient data

Shock resistance	50 drop tests onto concrete from a height of 2 m at -30 °C
Ambient operating temperature	-20 °C ... +50 °C
Storage temperature	-40 °C ... +70 °C
Permissible relative humidity	95 %, Non-condensing
Ambient light immunity	100,000 lx
Bar code print contrast (PCS)	≥ 40 %

General notes

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

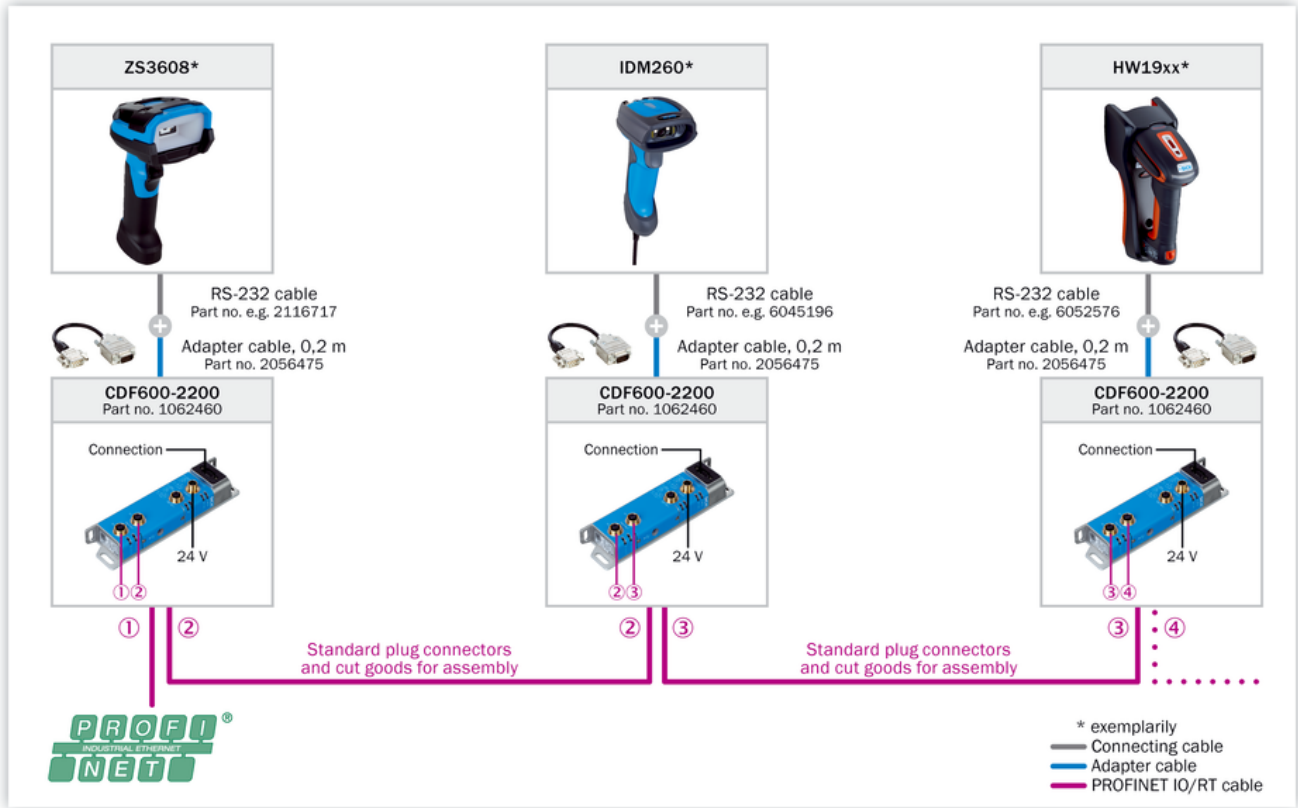
Classifications

ECLASS 5.0	27280101
ECLASS 5.1.4	27280101
ECLASS 6.0	27280101
ECLASS 6.2	27280101
ECLASS 7.0	27280101
ECLASS 8.0	27280101
ECLASS 8.1	27280101
ECLASS 9.0	27280101
ECLASS 10.0	27280101
ECLASS 11.0	27280101
ECLASS 12.0	27280101
ETIM 5.0	EC002550
ETIM 6.0	EC002550
ETIM 7.0	EC002550
ETIM 8.0	EC002550
UNSPSC 16.0901	43211701

Connection diagram

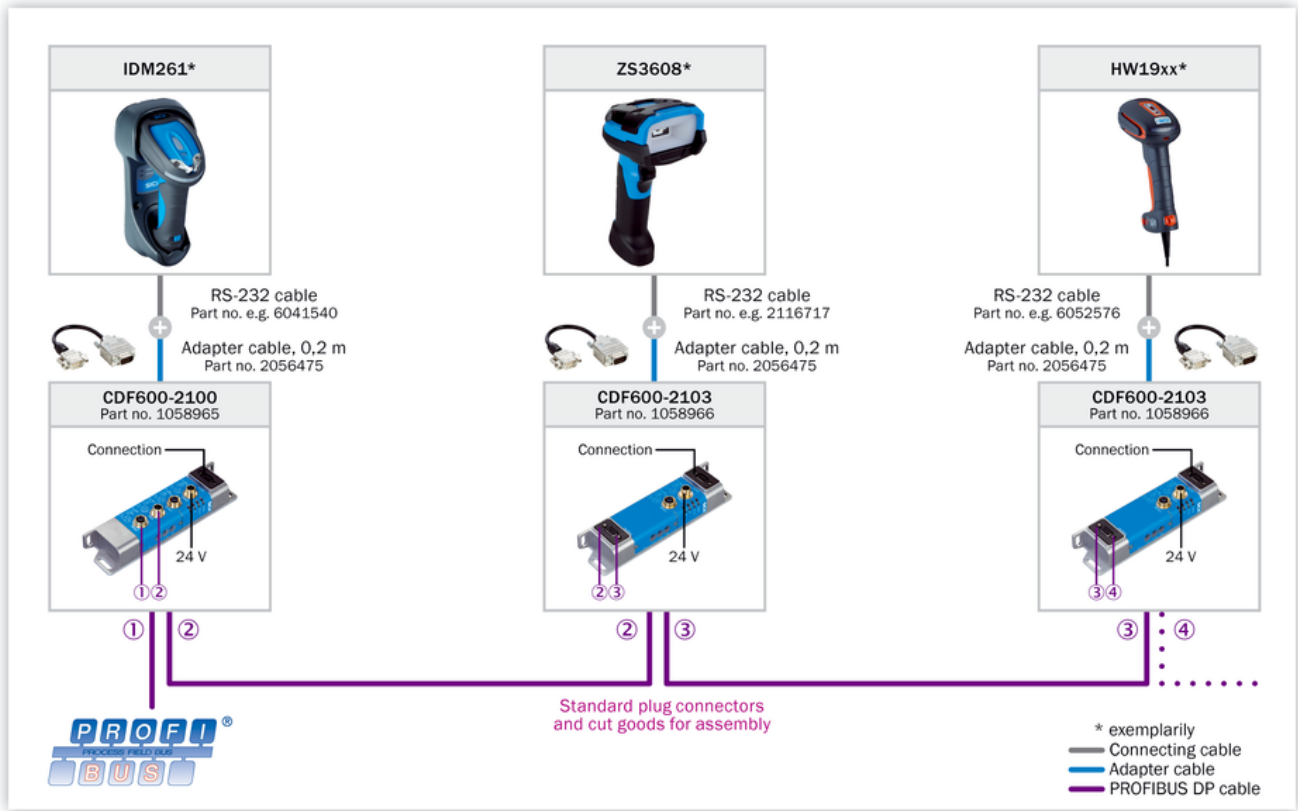
PROFINET IO/RT

PROFINET IO/RT



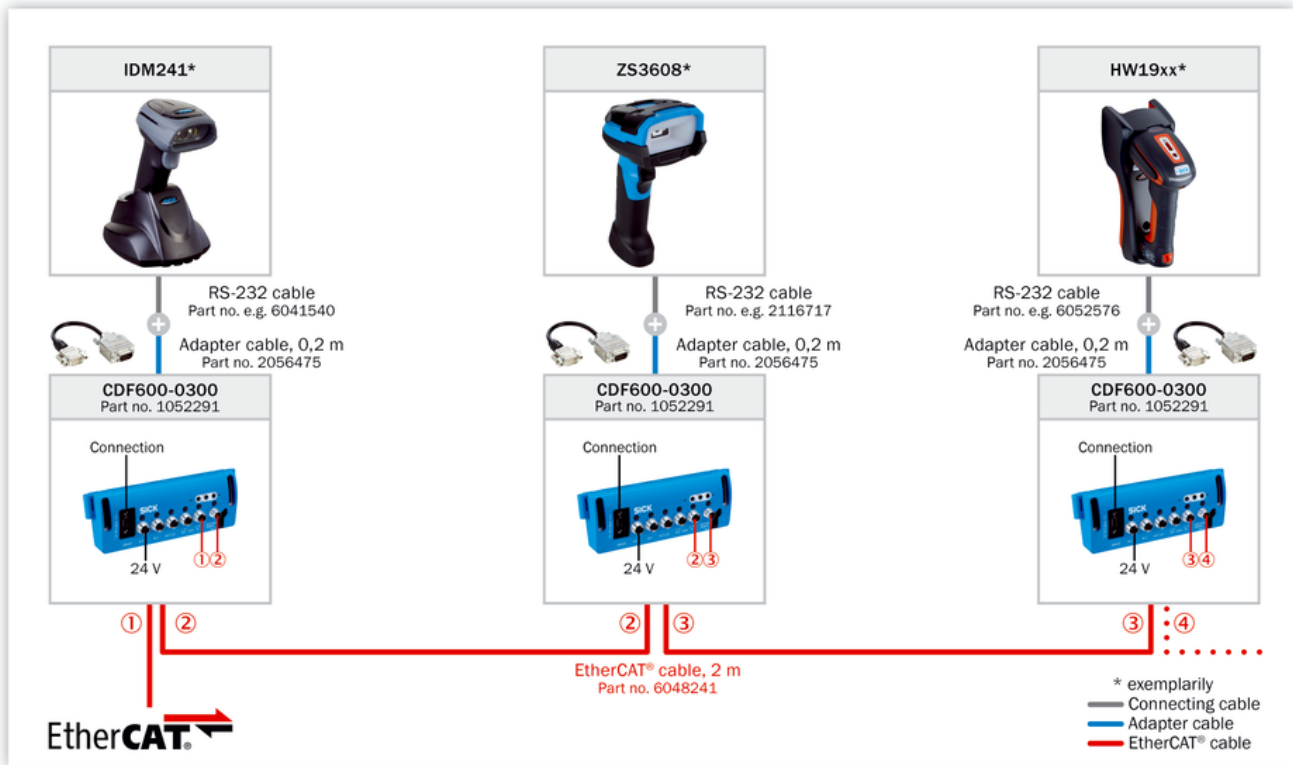
PROFIBUS DP

PROFIBUS DP



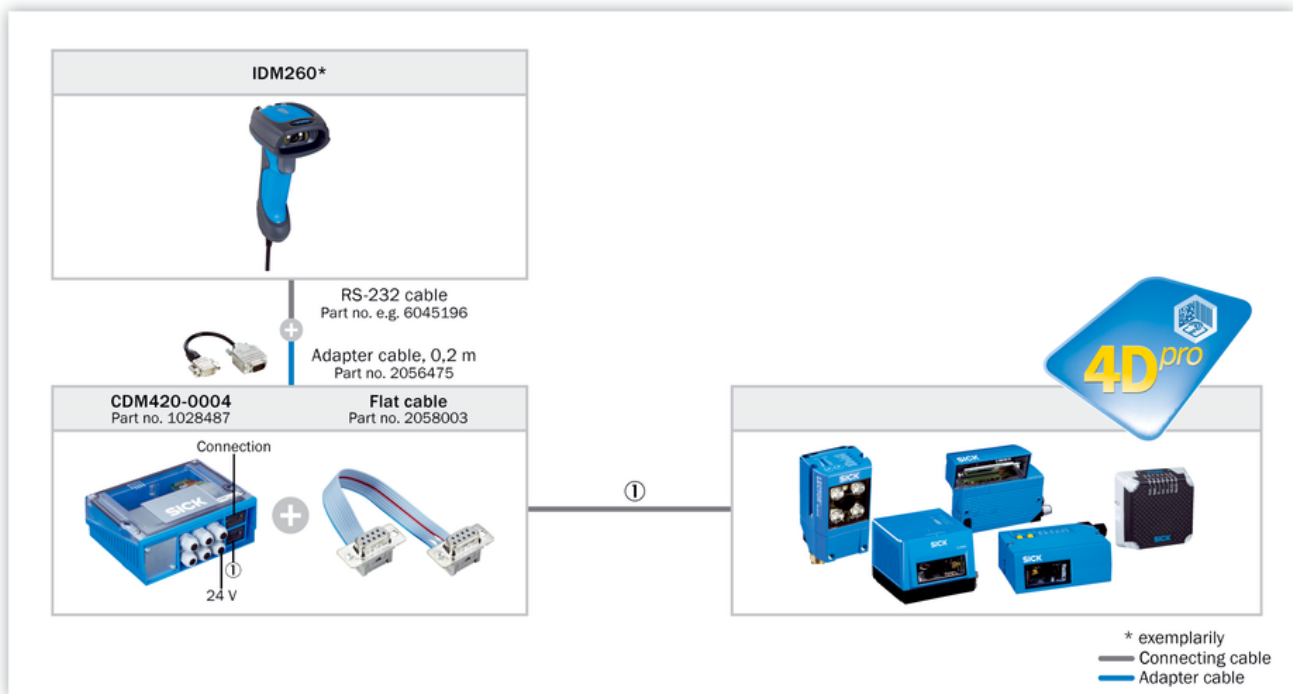
EtherCAT®

EtherCAT®



AUX looping

Looping-in via AUX



Selection Guide








*1) 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

	Brief description	Type	Part no.
Fieldbus modules			
	Connection kit for connecting a hand-held scanner to a PROFINET (Siemens) interface	Hand-held scanner PROFINET kit	1101488
	Adapter for connecting a handheld scanner to CDB620 / CDM420 / CDF600 / CD-F600-2, D-Sub 9-pin male connector, D-Sub 15-pin male connector, including 24V / 5V DC converter, AUX port adapter, for handheld scanners to CDB620/CDM420/ CDF600/CD-F600-2, adapter AUX port	YMHDAC-C30XXXMSA9	2056475
Rechargeable batteries and battery chargers			
	Charging station for HW1981, Bluetooth class 1, 100 m, host interfaces: RS-232 / USB / KBW (Honeywell CCB05-100BT-07N)	Base station	6067059

	Brief description	Type	Part no.
	<ul style="list-style-type: none"> • Connection type head A: Female connector, D-Sub, 9-pin, straight • Connection type head B: Male connector, RJ45 • Signal type: RS-232 TTL • Cable: 3 m, coiled cable • Description: RS-232 TTL, 5 V external voltage supply with option for host voltage supply on pin 9, industrial grade (Honeywell CBL-020-300-C00-01) 	Connection cable (male connector-female connector)	6064034
	<ul style="list-style-type: none"> • Connection type head A: Male connector, USB-A • Connection type head B: Male connector, RJ45 • Signal type: USB • Cable: 3 m, straightened cable • Description: USB, Keyboard connector or USB Com Port Emulation, 5 V host power, industrial grade (Honeywell CBL-500-300-S00-01) 	USB cable	6064633
	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)	Power supply unit	6052582
	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)	Power supply unit	6064641
	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)	Power supply unit	6064642

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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.”

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