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Technical Information
FieldPort SFP20

USB interface for configuration of IO-Link devices



Application

The FieldPort SFP20 is a USB interface for the configuration of Endress+Hauser IO-Link devices, and also of devices from other vendors. Combined with the IO-Link CommDTM and the IODD Interpreter, the FieldPort SFP20 complies with the FDT/DTM standards. It is suitable for service technicians configuring IO-Link measuring devices for point-to-point communication. The FieldPort is ready-integrated and tested, and users can start configuring IO-Link devices easily. The FieldPort works with FieldCare SFE500. It also works with every other FDT Frame, if required.

Your benefits

- Fast and easy commissioning of IO-Link devices.
- No network scan required, enormous time savings with point-to-point connection.
- Easy, trouble-free configuration of every IO-Link device, including devices from other vendors.
- High degree of flexibility regarding the choice of FDT Frame.

Endress+Hauser
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About this document

Symbols

Safety symbols

Symbol	Meaning
DANGER	**DANGER!** This symbol alerts you to a dangerous situation. Failure to avoid this situation will result in serious or fatal injury.
WARNING	**WARNING!** This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in serious or fatal injury.
CAUTION	**CAUTION!** This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in minor or medium injury.
NOTICE	**NOTE!** This symbol contains information on procedures and other facts which do not result in personal injury.

Symbols for certain types of information

Symbol	Meaning
	**Permitted** Procedures, processes or actions that are permitted.
	**Preferred** Procedures, processes or actions that are preferred.
	**Forbidden** Procedures, processes or actions that are forbidden.
	**Tip** Indicates additional information.
	Reference to documentation.
	Reference to page.
	Reference to graphic.
	Visual inspection.

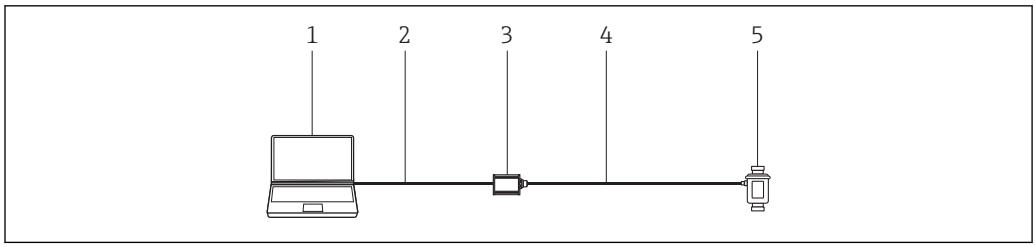
Function and system design

Function

The FieldPort SFP20 is a USB interface for the configuration of IO-Link devices. The devices can be connected to the FieldPort SFP20 with an M12-M12 connector. The FieldPort SFP20 can be connected to a laptop or tablet via a USB cable. The IO-Link devices are configured in conjunction with an FDT Frame, such as FieldCare SFE500. If the power from the USB interface of the laptop or tablet is not sufficient, the SFP20 can be connected to an external power supply in order to supply power to the IO-Link device.

System design

A point-to-point connection between the laptop and IO-Link devices is possible with the FieldPort SFP20.



1 IO-Link point-to-point connection

1 FieldCare SFE500
2 USB
3 FieldPort SFP20
4 IO-Link/M12-M12 connector
5 IO-Link field device

Output

Output signal

- Max. 80 mA via USB for sensor power supply
- 1 A via external power unit

Power supply

Supply voltage

- Operating voltage: 24 V_{DC}/USB 5 V_{DC}
- Operating current: <= 500 mA

Electrical connection

- IO-Link port: M12 x1 socket, 5-pin, A-coded
- Operating voltage: DC-9, 2.1 mm
- USB 2.0: USB connector, MiniB type

Environment

Ambient temperature range

0 to 45 °C (32 to 113 °F)

Storage temperature

–40 to 80 °C (–40 to 176 °F)

Humidity

95 % non-condensing

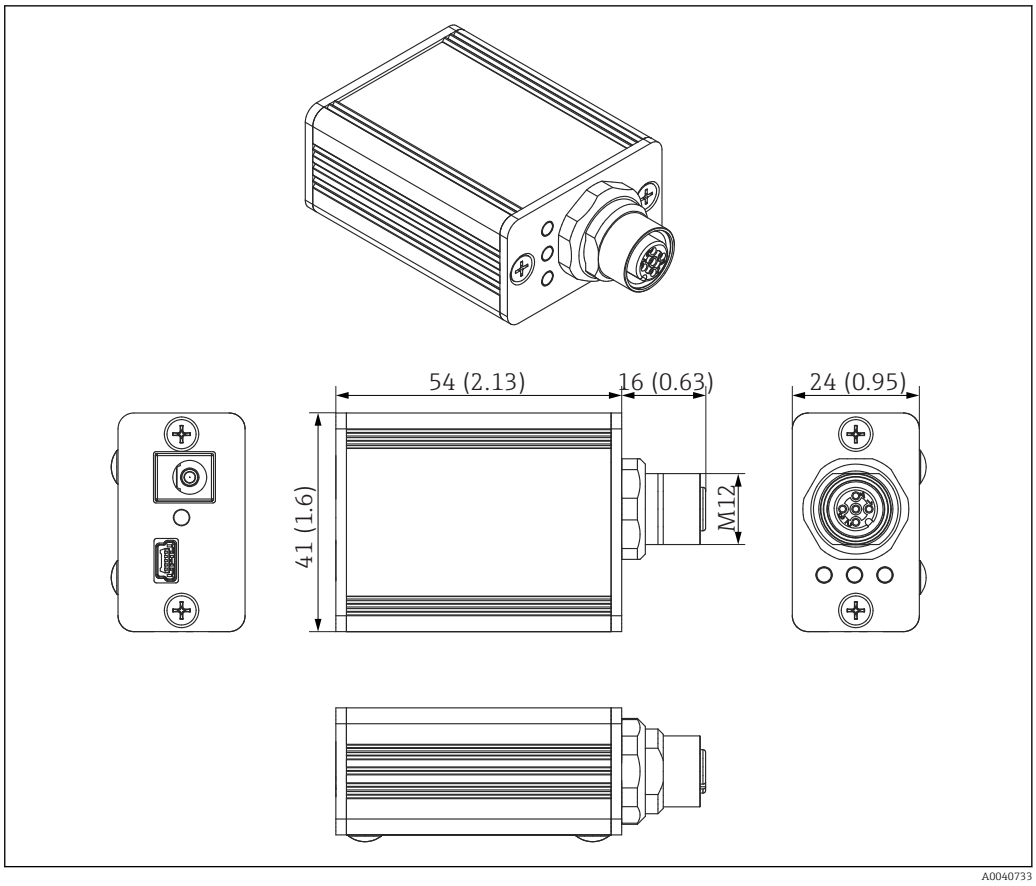
Degree of protection

IP20 (only in screwed situation)

Mechanical construction

Design, dimensions

70 mm · 41 mm · 24 mm(2.76 in · 1.6 in · 0.95 in)



2 *Dimensions of FieldPort SFP20, engineering unit: mm (in)*

Weight	Approx. 100 g
Material	Housing: aluminum

Human interface

Service interface	▪ Interface type: IO-Link ▪ Protocol: IO-Link V1.1, IO-Link V1.0
Function indicator	▪ Communication: LED green ▪ Status indicator: LED yellow ▪ Diagnostic indicator: LED red ▪ Operating voltage indicator: LED yellow

Certificates and approvals

CE mark	The FieldPort SFP20 meets the legal requirements of the relevant EU directives. The manufacturer has affixed the CE mark as confirmation that the FieldPort SFP20 has been successfully tested.

Ordering information

Scope of delivery

The scope of delivery comprises:
- FieldPort SFP20
- Power supply 24 V_{DC}
- USB connecting cable
- Operating Instructions

Accessories

Optional accessories:
M12–M12 connector

Supplementary documentation

FieldPort SFP20

Operating Instructions BA01984S/04/EN

FieldCare SFE500

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Registered trademarks

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Click to view pricing, inventory, delivery, and lifecycle information:

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FTE20-AA13AA11 FTL31-2WH1/0 RIA45-1056/0 RIA452-A212A11A FTC260-BA4J1 FTC262-BA44J1 FTL31-1K06/101 PMC11-AA1U1NBWBJA RMA42-10A1/0 RNO22-8M1B FTL31-AA4U3BAWDJ DMA20-AAAAA1 PMP11-1784/0 FTL31-1186/0 FTL31-16R2/0 FTW31-A1A3CA0A TMT31-1XX8/0 FTL33-AA4M3ABW5J FTC260-AA2D1 FTM20-4A45A FTW23-AA4MW5J RIA452-H111A11A TM311-CEQ6/0 TM401-X9H0/125 FTL33-AA4M3ACWBJ TMT128-ATJAA FTL31-1JN6/0 FTL31-34N0/0 FTL33-14E4/0 FTL33-AA4U3ABW5J