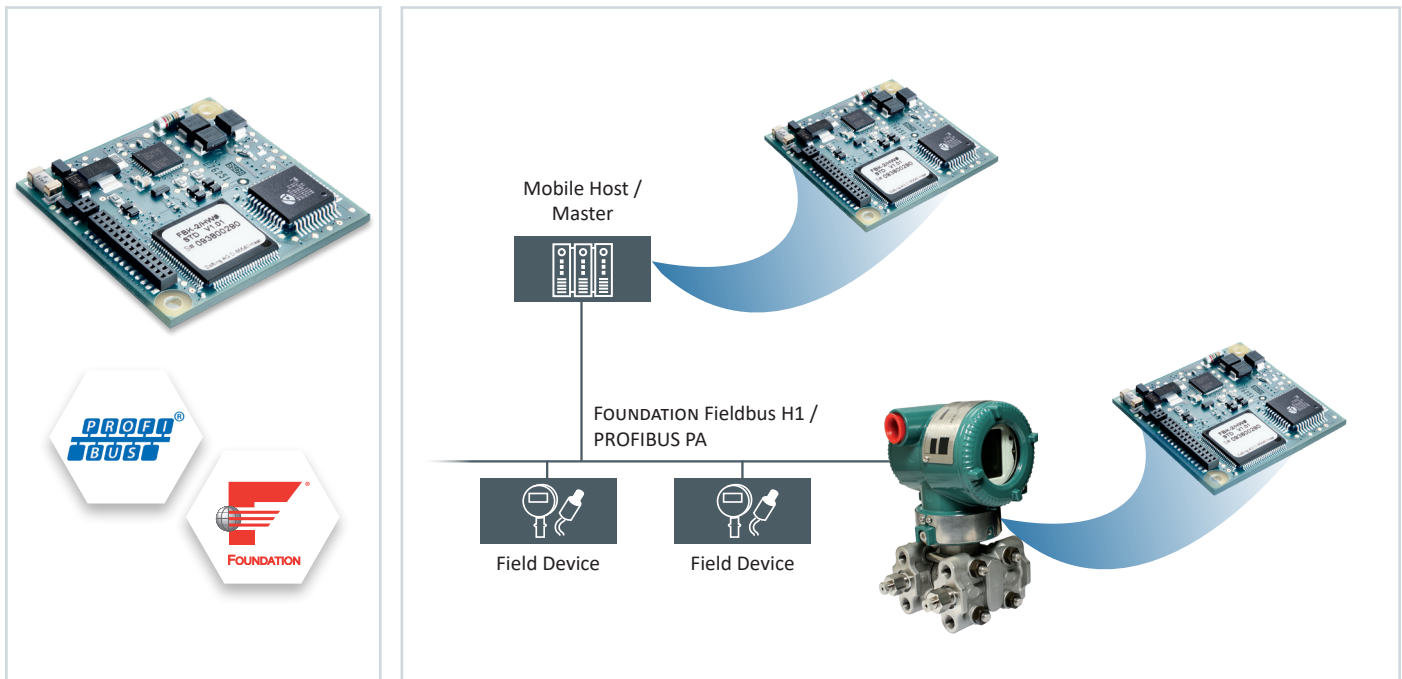


# FBK-2

Fast Implementation of FOUNDATION™ Fieldbus H1 and PROFIBUS PA Field Devices

- Designed for a fast and cost-effective fieldbus implementation in combination with the required firmware
- A single hardware platform allows implementing FOUNDATION Fieldbus H1 (FF) and PROFIBUS PA (PA) instruments
- Universal hardware with small footprint



## Fast Implementation

- Fast implementation path to FOUNDATION Fieldbus H1 or PROFIBUS PA instruments
- Fastest possible fieldbus implementation
- Proven hardware used in thousands of field devices
- Fully tested protocol stack, specifically developed for this platform
- Only hardware integration to be implemented

## Cost Reduction by Universal Piggyback Solution

- Small footprint for use in majority of process equipment
- Avoiding of expensive new development
- Piggyback to main board
- Several versions available: standard version, coated version, version with solder connection and Ex version for use in explosive environments

## Investment Protection Ensured by Continuous Product Development

- Meeting FF requirements for Physical Layer Test and Conformance Test as well as of PA specifications
- Main certification prerequisites already covered
- Long-term usability through continuous hardware and software product development
- Development of FF H1 and PA devices using identical hardware

# FBK-2

## Technical Data

Hardware	Processor	Renesas M16C
	RAM	31 KB Internal SRAM, 440 KB External SRAM
	Flash	512 KB Internal
	Non-Volatile RAM	8 KB
	Connectors	Samtec CLP-114-02-L-D, Samtec CLP-102-02-L-D
	Dimensions	40 mm x 40 mm x 10 mm
	Current Consumption	10 mA ... 26 mA (selectable)
	Power Supply to Device	3.15 V or 6.3 V; 3 mA, 8 mA or 16 mA
	Operating / Storage Temperature	-40 °C ... +80 °C / -40 °C ... +85 °C
	Relative Humidity	5 % ... 95 % (0 °C ... 60 °C during firmware programming)
	Weight	31 g
	Mounting	Fixed by connector and 2 screws
	Interfaces	Fieldbus Interface
Data Interface to Field Device		UART, I <sup>2</sup> C, SPI
Serial Field Device Interface		HART, Modbus RTU, proprietary
Certifications	ATEX	E II 2(1) G Ex ia IIC, e II (1) D [Ex iaD]
	FM US	Class I, Division 1, Groups A, B, C and D, Temperature Class T4 Class I, Zone 0 AEx ia IIC Temperature Class T4
	FM Canada	Class I, Division 1, Groups A, B, C and D, Temperature Class T4 Class I, Zone 0 Ex ia IIC, Temperature Class T4
	IECEX	Ex [ia Ga] IIC T4 Gb, [Ex ia Da] IIC

## Scope of Delivery

Hardware	FBK-2
Documentation	Hardware Description
Certificates	Physical Layer Test Certificate, Conformance Test Certificate, ATEX Certificate, FM Certificates, IECEx Certificate

## Order Numbers

EAA-KS-021200	FBK-2, standard version
ECA-KS-021201	FBK-2, standard version, conformal coated
EIA-KS-021202	FBK-2, standard version with Ex certification, potted
EBA-KS-021203	FBK-2, standard version with solder connection at board edge

## Additional Products and Services

VEL-SK-020230	Kit for Fast Development of Simple FOUNDATION Fieldbus H1 Transmitters
VEL-SK-020231	Kit for Fast Development of Simple PROFIBUS PA Transmitters
EVA-MK-020210	FBK-2 Evaluation Kit FOUNDATION Fieldbus H1
EVA-MK-020211	FBK-2 Evaluation Kit PROFIBUS PA
KSA-FK-020220	Starter Kit for FOUNDATION Fieldbus H1 Network Set-Up
KSA-FK-020221	Starter Kit for PROFIBUS PA Network Set-Up
KXA-YY-020223	FBK-2 Programming Adapter for Firmware Download
TSA-KK-023001	Introductory Training "FOUNDATION Fieldbus" This training is not offered as a standard training course, but tailored to individual customer requirements. It is usually held as part of a workshop and in connection with an integration project.
TRA-PB-TECH	PROFIBUS Technology Training

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