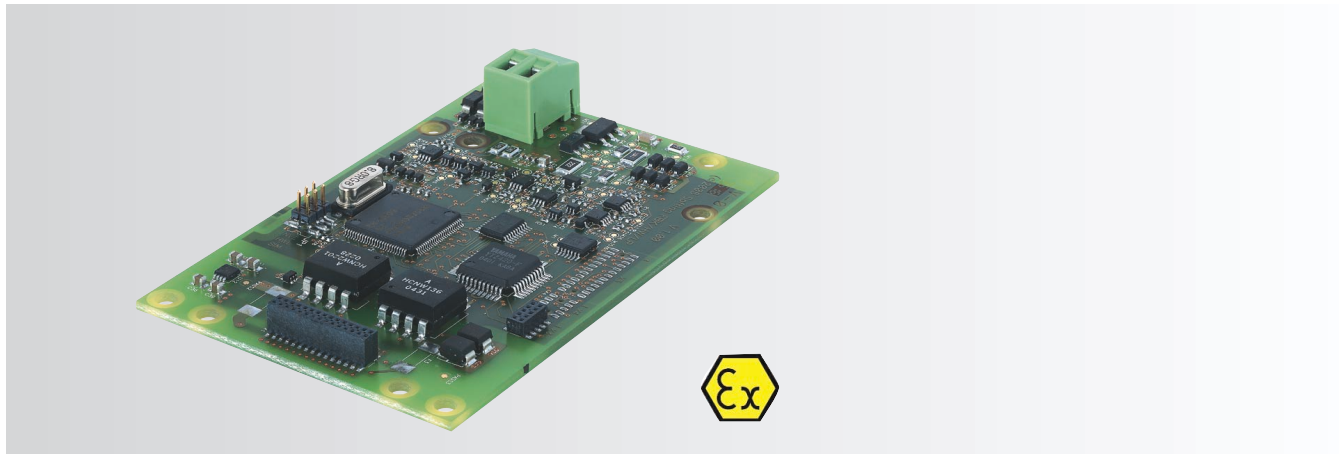




# Fieldbus Kit

Industrial Automation

Migrate existing devices in just six weeks to FOUNDATION™ fieldbus and PROFIBUS PA

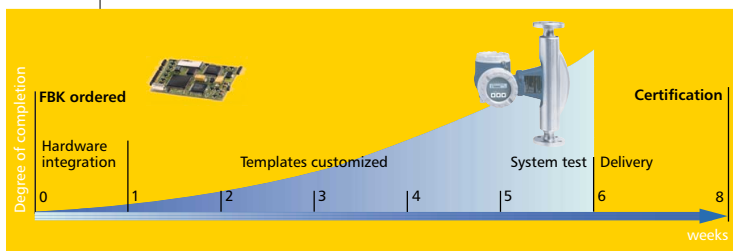


## Softing's solution is proven

The Fieldbus Kit (FBK) from Softing is an off-the-shelf, proven solution for the rapid development of FF-H1 and PROFIBUS PA field devices for Intrinsically (IS) and non-Intrinsically Safe (IS) environments. It can be used in conjunction with your existing analog/HART slave device to create a complete fieldbus product. The FBK is small enough to be integrated into most existing device housings.

## Customizing the templates

On the part of the software the solution is optimized for existing HART devices. In this case, after completing the hardware integration of your new fieldbus device, it is time to begin to modify the ready-made templates according to the existing HART commands and your specification. In addition to the device, required Device Description files need to be built for FF or PROFIBUS registration and the later commissioning of the device by a configuration tool. The cost of building these files is also included in the kit.



Upgrade your device in just six weeks!

## System test

Upon request, Softing can provide engineering services to integrate the customized software for your application. In this case, we will also commission the target hardware and test its basic functionality. We can also provide internal conformance and interoperability testing.

## The least expensive way to get on the bus

The kit contains all of the low-cost hardware electronics necessary to build the bridge from your analog/HART device to the H1 or PA world.

Because the hardware is ready-to-use, no costs for fieldbus physical layer testing are necessary. The board is fully designed to the specifications of the Fieldbus Foundation and the PROFIBUS Trade Organization and comes ready for all necessary conformance testing.



Hardware	Fieldbus Kit
CPU	M16C62P, Renesas
RAM	■ 31 kB internal ■ 128 kB external SRAM
Flash	384 kB internal
NV-RAM	4 kB

### Interfaces

Supported protocols	FOUNDATION fieldbus H1, PROFIBUS PA
Controller	Find1+
Fieldbus Interface	H1 compliant to IEC 61158-2, bus powered
Interface to Signal Converters	■ UART, I <sup>2</sup> C, SPI ■ 2 AI, 2 AO, 8 DI/DO programmable pins
Jumper	■ Simulate Enable ■ HW Write Lock ■ NV Erase

### Further Information

Dimensions	61 x 95 x 8 mm (Connector: 15 mm)
Operation Temperature	-40 °C ... + 85 °C
Storage Temperature	-40 °C ... + 85 °C
Relative humidity	5 % ... 95 %, non-condensing
Power consumption	max. 6 mA
Supply Voltages	3 V, 5 V (max. 20 mA)

### Registration

UL 508
FM 3610
EEx (EN50020:2002, EN50014:1999, EN60079-25:2004)
Shock/Vibration: IEC 60068-2

### Range of Application

Gas Group IIC
EEx ia Area 0, Intrinsically Safe Area Division 1 (USA)
Temperature Class T4
Device Categorie 1

### Software

PROFIBUS PA Slave	■ DP-V0 ■ DP-V1 features as required by PA Profil 3.0
FF Field Device	According to FF Specification 1.6
Function Blocks	AI, AO, DI, DO (FF only: PID, MAI, MAO, MDI, MDO on request)
Resource/Physical Block	Standard blocks with custom configurable values
Transducer Blocks	Supplied templates based on the HART-commands
Supported HART commands	■ All universal and common practice commands ■ User-defined commands on request

### Scope of Delivery

Fieldbus Kit, Templates, Device Description files
Physical Layer Compliance Certificate
Conformance Test Certificate

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