FBK-2 Evaluation Kit

Easy and Rapid Implementation of a Foundation™ Fieldbus or PROFIBUS PA Prototype

- Hardware and software for generating a Foundation Fieldbus (FF) H1 respectively a PROFIBUS PA (PA) communication interface for HART transmitters
- Designed for ease-of-use and requires no programming
- Qualified for further evaluation

Easy and Rapid Prototyping of Fieldbus Interface

- Turning any HART transmitter into an FF H1 or PA field device prototype
- Mapping a limited set of HART Universal Commands including process value to appropriate fieldbus block parameters
- Fast and easy integration of existing HART transmitter into fieldbus network for evaluation purposes
- Implementation through configuration only, without requiring any programming
- Applicable for proof-of-concept of the created FF and PA communication capabilities and as platform for gathering required experience regarding full fieldbus implementation

Ideal Basis for Full Fieldbus Implementation

- Based on hardware and software of Softing’s FBK-2 product
- Ideal platform for developing fully functional FF and PA communication interface for field device
- Only minor steps required to develop complete field device after completion of evaluation

Direct Usage in Applications Without Specific Preventive Measures

- Elimination of direct contact and protection against electrostatic discharge by plastic housing
- Possible use of interface prototype directly within fieldbus laboratory network

Applicable for Fieldbus Network Simulation

- Simulation of process values (ramp, saw tooth)
- Simulation of Control in the Field applications (FBK-2 Evaluation Kit FF only)
## FBK-2 Evaluation Kit

### Technical Data

<table>
<thead>
<tr>
<th><strong>Hardware</strong></th>
<th><strong>Software</strong></th>
<th><strong>Interfaces and Connectors</strong></th>
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</thead>
<tbody>
<tr>
<td>RAM: 31 KB internal, 440 KB external SRAM</td>
<td>Function Blocks: Analog Input (AI), Discrete Input (DI), Analog Output (AO), Discrete Output (DO), PID*</td>
<td>Fieldbus Interface: According to IEC 61158-2, fieldbus-powered</td>
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<tr>
<td>Flash: 384 KB internal</td>
<td>Transducer Block: HART mapping</td>
<td>26 mA rated current, max. 8 mA available for external use</td>
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<td>Non-Volatile RAM: 8 KB</td>
<td>Channels: HART process value</td>
<td>Connectors: Phoenix Contact MINI COMBICON Connectors</td>
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<tr>
<td></td>
<td>Link Master Capability*: For configuration as Backup Link Active Scheduler (LAS) device</td>
<td>Physical Properties: Abmessungen 65 mm x 65 mm x 25 mm</td>
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<td></td>
<td>HART Protocol: Support of Universal HART Commands #0, #3, #13, #18 and #48</td>
<td>Betriebs- / Lagertemperatur: 0 °C ... +55 °C / -20 °C ... +55 °C</td>
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<tr>
<td></td>
<td>Software Resource Block resp. Physical Block: Standard</td>
<td>Relative Luftfeuchtigkeit: 5 % ... 95 %, non-condensing</td>
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<tr>
<td></td>
<td>Function Blocks: Analog Input (AI), Discrete Input (DI), Analog Output (AO), Discrete Output (DO), PID*</td>
<td>Montage: DIN rail mountable</td>
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</table>

* Only refers to FBK-2 Evaluation Kit FF

### Scope of Delivery

- **Hardware**: FBK-2 in plastic housing
- **Software**: Firmware, Device Description files resp. GSD files on CD-ROM
- **Documentation**: Manual on CD-ROM

### Order Numbers

- **EVA-MK-020210**: FBK-2 Evaluation Kit FF
- **EVA-ML-020211**: FBK-2 Evaluation Kit PA

### Additional Products and Services

- **KSL-FK-020220**: Starter Kit FF-START for FOUNDATION Fieldbus H1 Network Set-Up
- **KSL-NL-020221**: PROFIBUS PA Starter Kit PA-START for PROFIBUS PA Network Set-Up
- **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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