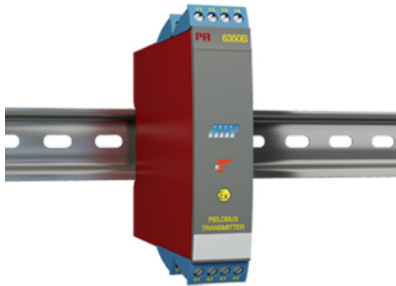


## Profibus PA / Foundation Fieldbus transmitter



### 6350B

- PROFIBUS PA ver. 3.0
- FOUNDATION Fieldbus ver. ITK 4.6
- Automatic switch between protocols
- FISCO-certified
- Basic or LAS capability with F.F.



#### Application

- Linearized temperature measurement with RTD or TC sensor.
- Converts analog mA signals into digital values on the bus communication.
- Difference, average or redundancy temperature measurement with RTD or TC sensor.
- Linear resistance, potentiometer and bipolar mV measurement.

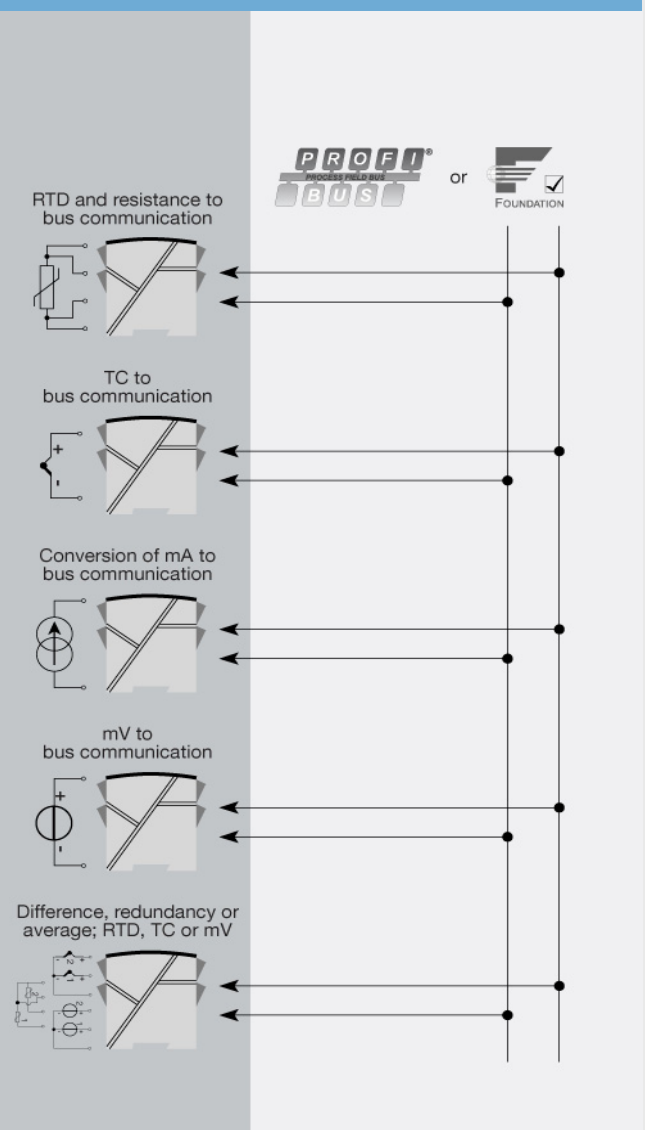
#### Technical characteristics

- Bus transmitter with both PROFIBUS PA and FOUNDATION™ Fieldbus communication. A unique switch function ensures automatic shift between the two protocols.
- Set-up for PROFIBUS PA can be done via Siemens Simatic® PDM®, ABB Melody / Harmony and Metso DNA software and for FOUNDATION Fieldbus via Emerson DeltaV, Yokogawa CS 1000 / CS 3000, ABB Melody / Harmony and Honeywell Experion software.
- Built-in simulation mode function.
- Polarity-independent bus connection.
- 24 bit A/D converter ensures high resolution.
- PROFIBUS PA function blocks: 2 analog.
- FOUNDATION Fieldbus function blocks: 2 analog and 1 PID.
- FOUNDATION Fieldbus capability: Basic or LAS.

#### Mounting / installation

- Mounted vertically or horizontally on a DIN rail. Using the 2-channel version up to 84 channels per meter can be mounted.

#### Applications



**Order:**

Type	Galvanic isolation	Channels
6350B	1500 VAC : 2	Single : A Double : B

**Environmental Conditions**

Operating temperature.....	-40°C to +85°C
Storage temperature.....	-40°C to +85°C
Calibration temperature.....	20...28°C
Relative humidity.....	< 95% RH (non-cond.)
Protection degree.....	IP20

**Mechanical specifications**

Dimensions (HxWxD).....	109 x 23.5 x 104 mm
Weight (1 / 2 channels).....	145 / 185 g
DIN rail type.....	DIN EN 60715/35 mm
Wire size.....	0.13...2.08 mm <sup>2</sup> AWG 26...14 stranded wire
Screw terminal torque.....	0.5 Nm

**Common specifications****Supply**

Supply voltage.....	9.0...30 VDC
Power dissipation, per channel.....	< 11 mA

**Isolation voltage**

Test voltage.....	1.5 kVAC for 60 s
Working voltage.....	50 VRMS / 75 VDC

**Response time**

Response time (programmable).....	1...60 s
Warm-up time.....	30 s
Signal / noise ratio.....	Min. 60 dB
Accuracy.....	Better than 0.05% of selected range
Updating time.....	< 400 ms
Execution time, PID controller.....	< 200 ms
Execution time, analog input.....	< 50 ms
Signal dynamics, input.....	24 bit
EMC immunity influence.....	< ±0.1% of reading
Extended EMC immunity: NAMUR NE21, A criterion, burst.....	< ±1% of reading

**Input specifications****RTD input**

RTD type.....	Pt25...1000, Ni25...1000, Cu10...1000, lin. R, potentiometer
Cable resistance per wire.....	50 Ω (max.)
Sensor current.....	Nom. 0.2 mA
Effect of sensor cable resistance (3-/4-wire).....	< 0.002 Ω / Ω
Sensor error detection.....	Yes
Short circuit detection.....	< 15 Ω

**Linear resistance input**

Linear resistance min...max.....	0 Ω...10000 Ω
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**Potentiometer input**

Potentiometer min...max.....	10 Ω...100 kΩ
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**TC input**

Thermocouple type.....	B, E, J, K, L, N, R, S, T, U, W3, W5
Cold junction compensation (CJC).....	< ±0.5°C
Sensor error detection.....	Yes
Sensor error current: When detecting / else.....	Nom. 2 μA / 0 μA
Short circuit detection.....	< 3 mV

**Bipolar current input**

Measurement range.....	-100...+100 mA
Input resistance.....	10 Ω + PTC < 20 Ω
Cable breakage detection (4...20 mA).....	< 0.3 mA

**Bipolar mV input**

Measurement range.....	-800...+800 mV
Min. measurement range (span).....	2.5 mV
Input resistance.....	10 MΩ
Short circuit detection.....	< 3 mV

**Output specifications****PROFIBUS PA connection**

PROFIBUS PA protocol.....	Profile A&B, ver. 3.0
PROFIBUS PA protocol standard.....	EN 50170 vol. 2
PROFIBUS PA address (at delivery).....	126
PROFIBUS PA function blocks.....	2 analog

**FOUNDATION Fieldbus connection**

FOUNDATION Fieldbus protocol.....	FF protocol
FOUNDATION Fieldbus protocol standard.....	FF design specifications
FOUNDATION Fieldbus version.....	ITK 4.6
FOUNDATION Fieldbus capability.....	Basic or LAS
FOUNDATION Fieldbus function blocks.....	2 analog and 1 PID

**Approvals**

ATEX 2014/34/EU.....	KEMA 03ATEX1013 X
IECEX.....	DEK 14.0071X
FM.....	3015609
CSA.....	1418937
EAC Ex TR-CU 012/2011.....	RU C-DK.GB08.V.00410