



## Profibus PA / Foundation Fieldbus transmitter

### 5350A

- PROFIBUS PA ver. 3.0
- FOUNDATION Fieldbus ver. ITK 4.6
- Automatic switch between protocols
- Basic or LAS capability with F.F.
- For DIN form B sensor head mounting



#### Application

- Linearized temperature measurement with RTD or TC sensor.
- Difference, average or redundancy temperature measurement with RTD or TC sensor.
- Linear resistance, potentiometer and bipolar mV measurement.

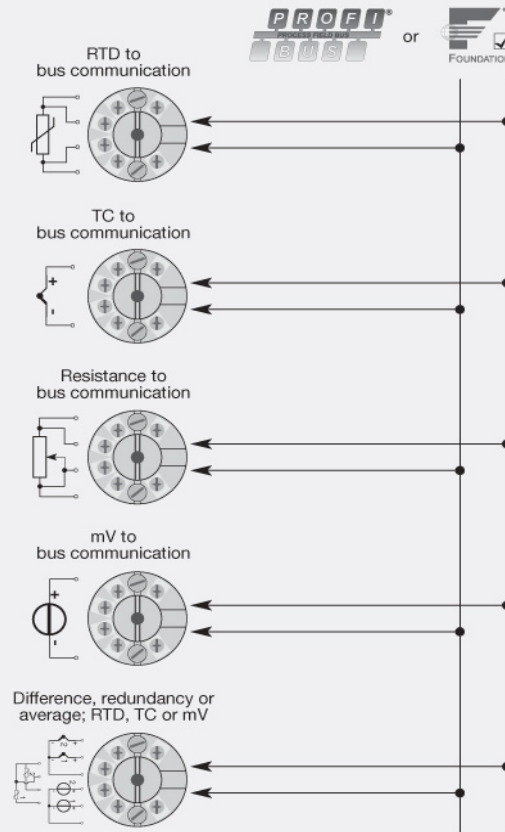
#### Technical characteristics

- 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.
- The simulation mode function can be activated by way of a magnet.
- 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

- For DIN form B sensor head or DIN rail mounting with the PR fitting type 8421.

#### Applications



**Order:**

Type
5350A

**Environmental Conditions**

Operating temperature.....	-40°C to +85°C
Calibration temperature.....	20...28°C
Relative humidity.....	< 95% RH (non-cond.)
Protection degree (encl./terminal).....	IP68 / IP00

**Mechanical specifications**

Dimensions.....	Ø 44 x 20.2 mm
Weight approx.....	55 g
Screw terminal torque.....	0.4 Nm
Vibration.....	IEC 60068-2-6
2...25 Hz.....	±1.6 mm
25...100 Hz.....	±4 g

**Common specifications****Supply**

Supply voltage.....	9.0...32 VDC
Max. required power.....	< 350 mW

**Isolation voltage**

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

**Response time**

Response time (programmable).....	1...60 s
Quiescent current.....	< 11 mA
Max. current increase in the event of an error.....	< 7 mA
Warm-up time.....	30 s
Signal / noise ratio.....	Min. 60 dB
Updating time.....	< 400 ms
Execution time, analog input.....	< 50 ms
Accuracy.....	Better than 0.05% of selected range
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

**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. 4 µA / 0 µA
Short circuit detection.....	< 3 mV

**Voltage input**

Measurement range.....	-800...+800 mV
Input resistance.....	10 MΩ

**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

**Observed authority requirements**

EMC.....	2014/30/EU
RoHS.....	2011/65/EU
ATEX.....	2014/34/EU
EAC.....	TR-CU 020/2011
EAC Ex.....	TR-CU 012/2011

**Approvals**

ATEX.....	KEMA 02ATEX1318 X
CSA.....	1418937
FM.....	3015609
NEPSI.....	GYJ19.1264U
EAC Ex.....	RU C-DK.HA65.B.00355/19