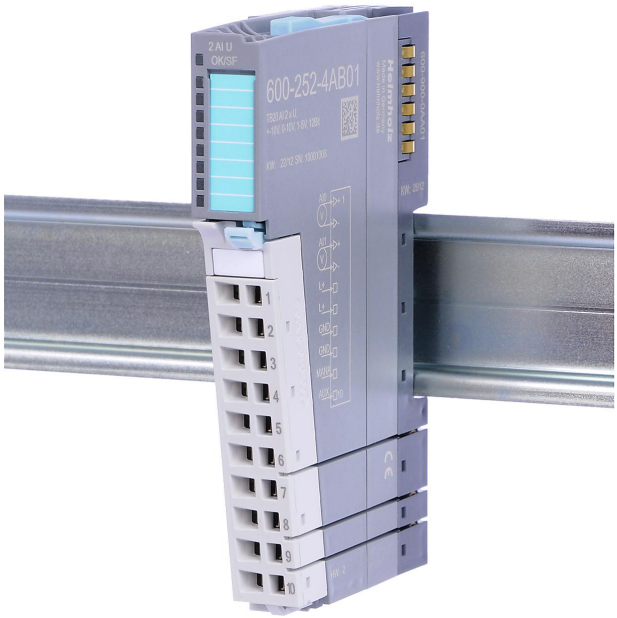
# 600-252-4AB01




## Analog-input-module, U, 12 Bit

**2x**

- Measuring ranges 0 ... 10 V, 1 ... 5 V, ±10 V, ±5 V, ±2.5 V, individually configurable for each channel
- Measurement resolution: 11 bit + sign
- Diagnostic messages
- Wire break detection (for 1 ... 5 V)
- Limit value alarms for each channel
- A bi-color LED (blue/red) indicates the module operating status and any malfunctions
- 2 analog inputs for measuring voltage, electrically isolated from the backplane bus
- 2 process input words

## Info

Analog input modules for the modular fieldbus IO system TB20. Note: Individual modules cannot be combined with IO systems from other manufacturers. The scope of delivery already includes the appropriate front connector for the cabling and a base module. The module has 2 analog inputs. Parameters for the module: Diagnostic alarm: On | OffOverflow / underflow diagnosis: On | OffRepresentation values: SIMATIC* S7 | SIMATIC* S5 | INT16 Parameters for each channel: Wire break detection (only for 1 ... 5 V): On | OffInterference frequency suppression: None | 10 Hz | 50 Hz | 60 Hz | 400 HzMeasuring ranges: Deactivated | 0 ... 10 V | 1 ... 5 V | ±10 V | ±5 V | ±2.5 VLimit value alarms enabled: On | OffUpper/lower limit: 16 bit analog value (±27648) * SIMATIC is a registered trademark of Siemens AG.

# Technical data

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|---|---|
| **General information** | |
| Order number | 600-252-4AB01 |
| Article name | AI 2x U, ±10 V, 0-10 V, 1-5 V, 12 bits |
| Scope of delivery | AI 2x U, ±10 V, 0-10 V, 1-5 V, 12 bits |
| Dimensions (DxWxH) | 110 x 14 x 73 mm |
| Weight | Approx. 70 g |
| Number of inputs | 2 |
| Internal | Max. 95 mA |
| Power dissipation | Max. 0.7 W |
| Parameter configuration length | 12 bytes |
| General error indicator | Red LED |
| Hot-swap capable | Yes |
| **Electrical isolation** | |
| from the backplane bus | Yes |
| Between the channels | No |
| **Measuring** | |
| Measuring ranges / load resistance | 0 ... 10 V/30 kohm, |
| Measuring method | Integration |
| Measurement resolution | 11 bit + sign |
| Interference frequency suppression | None \| 10 Hz \| 50 Hz \| 60 Hz \| 400 Hz |
| Refresh rate / conversion rate | Number of active channels x conversion time +16 ms for wire break detection for each channel when activated. |
| Diagnoses | Upper measuring range limit exceeded (overflow), lower measuring range limit fallen below (underflow), wire break (for 1 ... 5 V only), parameter assignment error |
| Process alarms | Upper and lower limit per channel |
| **Error limits** | |
| Operational error limit in the entire temperature range | ±0.5 % relative to the nominal range |
| Basic error limit at 25 °C | ±0.3 % relative to the nominal range |
| Temperature error | ±0.005 %/K relative to the nominal range |
| Linearity error | ±0.05 %/K relative to the nominal rangesv |
| Repeating accuracy in steady state at 25 °C | ±0.05 %/K relative to the nominal range |
| **Ambient conditions** | |
| Ambient temperature | 0 °C ... +60 °C |
| Transport and storage temperature | -20 °C ... +80 °C |
| Relative air humidity | -20 °C ... +80 °C 95 % r H without condensation |
| Protection rating | IP 20 |
| Certifications | CE, UL |
| **UL** | |
| Surrounding Air Temperature | 0 °C ... +60°C |
| Pollution degree | 2 |
| **CE** | |
| Noise immunity | DIN EN 61000-6-2 "EMC Immunity" |
| Interference emission | DIN EN 61000-6-4 "EMC Emission" |
| Vibration and shock resistance | DIN EN 60068-2-6:2008 „Vibration", DIN EN 60068-2-27:2010 „Shock" |