

BU3111

PLC / Automation

Analog Input Module AI531

Sales Release of Analog Input module AI531



We are please to announce the release of the analog input module AI531 with following technical features:

Technical features of the analog input module AI531

The AI531 analog module can be used as a remote expansion module at the FBP Interface Module DC505-FBP, at the CS31 Bus Module DC551-CS31 or locally at an AC500 CPU. It provides eight analog input channels individually configurable with the following functionalities:

- Differential inputs
- Up to 20 V DC common mode voltage allowing the module to be used with signal having big potential differences
- High resolution up to 15 bit + sign according measuring range
- High accuracy typ. 0,1% (voltage), 0,3% (current)
- 8 channels usable in up to 4-wire technology
- Several measuring ranges available and sensor types usable

The measuring ranges

Voltage input ranges

- 0 ... 5 V, 0 ... 10 V (15 bits)
- ± 50 mV, ± 500 mV (15 bits + sign)
- ± 1 V, ± 5 V, ± 10 V (15 bits + sign)

Current input ranges

- 0 ... 20 mA (15 bits)
- 4 ... 20 mA (15 bits)
- ± 20 mA (15 bits + sign)

Resistive Temperature measurement (0.1°C)

- Pt100 -50°C ... +70°C respectively +400°C (2, 3 and 4-wire)
- Pt100 -200°C ... +850°C (2, 3 and 4-wire)
- Pt1000 -50°C ... +400°C (2, 3 and 4-wire)
- Ni1000 -50°C ... +150°C (2, 3 and 4-wire)
- Cu50 (1.426) -50°C ... +200°C (2, 3 and 4-wire)
- Cu50 (1.426) -200°C ... +200°C (2, 3 and 4-wire)

Resistance measurement

- 0 ... 50 k Ohm

Thermocouple measurement

- Type J
 - -210 °C ... 1200 °C
 - Fe-CuNi
 - 1 channel used
- Type K
 - -270 °C ... 1372 °C
 - Ni-CrNi
 - 1 channel used
- Type N
 - -270 °C ... 1300 °C
 - NiCrSi-NiSi
 - 1 channel used

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- Type **S**
 - -50 °C ... 1768 °C
 - Pt10Rh-Pt
 - 1 channel used
- Type **T**
 - -270 °C ... 400 °C
 - Cu-CuNi
 - 1 channel used

Resistance measurement bridge

For weight measurement e.g. using constraint gauge.

Digital signal

All the analog inputs can be also used as simple digital input.

The module can be used for each channel as 2, 3 or 4-wire

connection and doesn't need 2 channels for 4-wire as the other AC500 analog modules.

The product has CE, cUL and GOST R approvals.

Information about additional certifications is on request.

We hope that you'll enjoy the new functionalities offered together with the AC500 product range.

Ordering Information AI531

1SAP250600R0001 AI531:
S500, Analog Inp. Module 8AI, U/I/RTD

Your PLC team

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