



AI202/SI, AI204/SI Analog Input Modules

The analog input modules AI202/SI and AI204/SI offer 2 or 4 high resolution analog 16 bit current input channels. Single channel isolation, high immunity to interference, as well as integrated signal filtering (delta-sigma converter) make this module particularly interesting for process technology.

- 2 or 4 analog inputs
- Input current 0 to 20 mA
- Input impedance 75 Ω
- Resolution: 16 bit
- Refresh cycle time 250 ms / channel
- Galvanic isolation of channels
- Galvanic isolation from system
- Monitoring of internal voltages

Item	Item-No.
AI202/SI	00012245-10
AI204/SI	00012245-00

AI202/SI, AI204/SI	
Current inputs	
Quantity	2 (AI202/SI) or 4 (AI204/SI)
Input current range	0 to 20 mA
Input impedance	75 Ω
Digital resolution	16 bit
Value of the LSB	509 nA (Vref = 2.5 V to 75 Ω)
Cross-talk attenuation	> 100 dB between the channels
Signal suppression 50 Hz / 60 Hz	> 60 dB
Error at 25 °C	$\pm 0.1\%$
Error at the entire temperature range	$\pm 0.5\%$
Sample frequency	4 measurements per second / channel
Input filter	fg (3dB) delay time 1ms, Low-pass filter: 1st order
Galvanic isolation of channels	500 V
Galvanic isolation from system	500 V
Approvals / Certificates	
General	CE, cULus, CCC
Marine	DNV GL, LR, ABS, BV
Ambient conditions	
Operating temperature	-30 to +60 °C
Rel. humidity operation	5 to 95 % without condensation
Storage temperature	-40 to +85 °C
Rel. humidity storage	5 to 95 % with condensation
Pollution degree	2 (without condensation; according to IEC 60664-1)

Order Codes		
Item	Item No.	Description
AI202/SI	00012245-10	Analog input module; 2x In 20mA; 16bit; 0.1%; single isolated
AI204/SI	00012245-00	Analog input module; 4x In 20mA; 16bit; 0.1%; single isolated
Accessories		
SS-AI202/SI B+C	00012354-50	Terminal set Phoenix screw side (2x SS 35/03) with labeling strip and coding elements
SS-AI204/SI B+C	00012353-50	Terminal set Phoenix screw side (4x SS 35/03) with labeling strip and coding elements
KS-AI204/SI B+C	00024539-00	Terminal set cage clamp small (4x KS 35/03) with labeling strip and coding elements