



AI208/SI Analog Input Modules

The compact analog input module AI208/SI offers eight individual galvanically isolated current inputs. The measuring range is +/- 24.6 mA and covers standards 4 to 20 mA, 0 to 20 mA and -20 to +20 mA. Via adjustable measuring range limits errors, such as short circuit, sensor defect or wire break can be easily detected. Threshold values that can be configured within the measuring range permit monitoring of the process factor without having to sample it. The shunt is protected against short circuit of the 24 V supply, which can easily occur with the sensor wiring. Robustness and above-average diagnostic capabilities are the outstanding characteristics of this input module.

- 8 analog inputs
- Input current 0 to 20 mA, 4 to 20 mA, -20 to +20 mA
- Input impedance approx. 200 Ω
- Resolution: 13 to 16 bit
- Adjustable input filter 2.5 kHz to 2.5 Hz

Item	Item-No.
AI208/SI	00017772-00
AI208/SI CC	00018843-00

AI208/SI		
Current inputs		
Quantity	8	
Input current range	0 to 20 mA, 4 to 20 mA, -20 to +20 mA	
Measuring range	±24.6 mA	
Input impedance	Normally 200 Ω	
Digital resolution	13 bit (2.5 kHz filter) to 16 bit (10 Hz filter)	
Value of the LSB	751,202 nA	
Cross-talk attenuation	> 80 dB between the channels	
Signal suppression 50 Hz / 60 Hz	75 dB / 80 dB at 2.5 Hz filter	
Sample frequency	Maximum 10 kHz (filter 2.5 kHz)	
Filtering slope	From cutoff frequency (3 dB) with 60 dB/decade	
Input filter	Adjustable: 2.5 kHz, 1.2 kHz, 640 Hz, 320 Hz, 160 Hz, 80 Hz, 40 Hz, 20 Hz, 10 Hz, 5 Hz, 2.5 Hz	
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	Standard	ColdClimate ^(*)
Operating temperature	-30 to +60 °C	
Rel. humidity operation	5 to 95 % without condensation	5 to 95 % with 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)	2 (according to IEC 60664-1)

Order Codes		
Item	Item No.	Description
AI208/SI	00017772-00	Analog input module 8x IN; ±20 mA /13 .. 16bit; 0.1%; sample time configurable up to 100µs; threshold; single isolated
AI208/SI CC	00018843-00	Like AI208/SI; ColdClimate ^(*)
Accessories		
KZ-AI208/SI B+C ¹⁾	00019091-00	Terminal set cage clamp (8x KZ 35/03) with labeling strip and coding elements → not for new developments
KS-AI208/SI B+C	00027409-00	Terminal set cage clamp small (8x KS 35/03) with labeling strips and coding elements
SS-AI208/SI B+C	00019866-00	Terminal set Phoenix screw side (8x SS 35/03) with labeling strips and coding elements

1) Article will be discontinued and replaced by KS-AI208/SI B+C (00027409-00)