

Select instrumentation analog inputs when...

...you need to read thermocouples, or you need differential inputs for high accuracy, or you need floating 4-20 mA inputs.

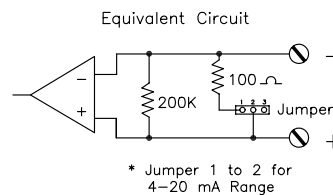
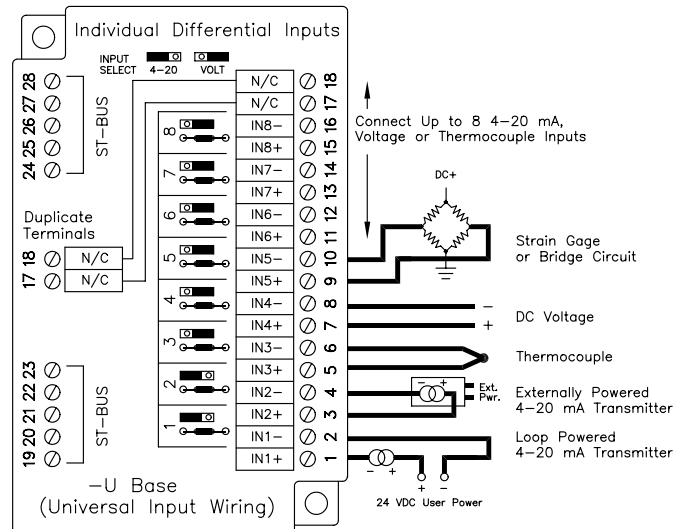
- Advanced 16-bit A/D converter for extreme accuracy
- True differential inputs minimize noise and ground loops
- Software selectable ranges – mix inputs on module
- Linearizes and compensates thermocouple readings
- Upscale/downscale thermocouple burnout detection
- Fault tolerant 4-20 mA range with an auto-polarity feature



Performance Specifications

Number of channels	8
Lowest voltage range	+/- 0.062 Volts
Maximum voltage range	+/- 10.0 Volts
Auto-polarity current range	4-20 mA
Thermocouple types (see note)	J,K,E,R,T,B,C,N,S
A/D resolution	16 bits
Full scale accuracy (@ 20°C)	+/- 0.02%
Input span adjustability	+/- 25%
Input offset adjustability	+/- 25%
Span temperature coefficient	+/- 30 ppm per °C
Offset temperature coefficient	+/- 30 ppm per °C
mV and voltage input impedance	200K Ohms
4-20 mA input impedance	100 Ohms
CMRR (at 50/60 Hz)	160 db
DMRR (at 50/60 Hz)	66 db
Common mode input voltage:	
Between two input terminals	+/- 25 VDC
Between inputs and ground	1200 Volts
No damage input voltage	+/- 50 VDC
Fastest scan rate (all 8 channels)	500 mS
Maximum ST-Bus power	1200 mW
Isolation (input to ST-Bus)	1200 VDC
Operating temperature range	-30 to 70°C
Storage temperature range	-40 to 85°C
Humidity (non-condensing)	5 to 95%

Note: Thermocouple inputs are cold junction compensated and reported as °F, °C or 0.1°C.



Ordering Information

Description	Part Number
8 Inputs w/Wiring Base	ST-AI-INS-08U
Module only	ST-AI-INS-08M