AD031A – 8 Channel Current Analog Input

Specifications	
Number of channels	8 differential
Input ranges	0~20 mA, 4~20 mA (input impedance 250 Ω)
Line break detection	4 – 20 mA
Resolution	16 bits
Accuracy	±0.1% max at 25°C
Drift	Zero drift: +/-0.06 µV/°C Span drift: +/-30 PPM/°C
Step response (5~95%)	50 ms/channel
Setup time	20 ms/channel
Settle time	50 ms/channel
Conversion method	Sigma-Delta
Rejection mode	Common: 150 dB@60 Hz Normal: 150 dB@60 Hz
Isolation	2.5 KV optical isolation between input signals and CPU
Internal current consumption	400 mA
Range selection	DIP switches, all channels must be same range
External connections	20-pt. terminal block connector, max. wire size #14 AWG
Weight	395 g

Features
• Built-in high/low limit detection capabilities
• Hot swappable under power
• Individual channel enable/disable
• Engineering Unit Scaling

Terminal #	Signal	Wiring Diagram
1	CH1+	
2	CH1-	
3	CH2+	
4	CH2-	
5	CH3+	
6	CH3-	
7	CH4+	
8	CH4-	
9	GND	
10	FG	
11	CH5+	
12	CH5-	
13	CH6+	
14	CH6-	
15	CH7+	
16	CH7-	
17	CH8+	
18	CH8-	
19	GND	
20	FG	