# AD020 – 4 Ch Analog Voltage or Current Input

| Specifications | |
| --- | --- |
| **Number of input channels** | 4 differential |
| **Input ranges** | 0~10V, 1~5 V, ±10 V   (input impedance 10 MΩ) |
| | 0~20 mA, 4~20 mA, ±20 mA   (input impedance 250 Ω) |
| **Line break detection** | For ranges of 1~5 V and 4~20 mA |
| **Resolution** | 15 bits |
| **Accuracy** | ±0.1% FSR |
| **Drift** | Zero drift: +/-0.06, µV/°C  Span drift:  +/-30 PPM/°C |
| **Step response (5~95%)** | 18 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** | 390 g |
| **Features** | |

- Built-in high/low limit detection capabilities
- Individual channel enable/disable
- Engineering Unit Scaling

| Terminal # | Signal | Wiring Diagram |
| --- | --- | --- |
| 1 | CH1_V+ | Current Input / Voltage Input wiring diagrams |
| 2 | CH1_V- | |
| 3 | CH1_I+ | |
| 4 | CH1_I- | |
| 5 | CH2_V+ | |
| 6 | CH2_V- | |
| 7 | CH2_I+ | |
| 8 | CH2_I- | |
| 9 | CH3_V+ | |
| 10 | CH3_V+ | |
| 11 | CH3_I+ | |
| 12 | CH3_I- | |
| 13 | CH4_V+ | |
| 14 | CH4_V+ | |
| 15 | CH4_I+ | |
| 16 | CH4_I- | |
| 17 | GND | |
| 18 | GND | |
| 19 | FG | |
| 20 | FG | |