I-7000 is a family of network data acquisition and control modules. They provide analog to digital, digital to analog, digital input/output, timer/counter and other functions. The modules can be remotely controlled by a set of commands.

The I-7019 is a 8-channel universal analog input module. The I-7019 supports more thermocouple types and enhances the measure range of some types. The I-7019R provides +/-240Vrms over voltage protection.

### Specifications

**Analog Input**
- Type: mV, V, mA, Thermocouple
- Channels: 8 differential
- Voltage range: +/-15mV, +/-50mV, +/-100mV, +/-150mV, +/-500mV, +/-1V, +/-2.5V, ±5V, ±10V
- Current range: +/-20mA (jumper selectable)
- Resolution: 16 bits
- Sampling rate: 8 Samples/Second (total)
- -3dB BandWidth: 5.24Hz
- Voltage Input impedance: >2M ohms
- Overvoltage Voltage Protection: +/-240Vrms (for I-7019) +/-240Vrms (for I-7019R)
- Accuracy: ±0.15%
- CMR: Typical 86dB
- Individual Channel Configurable
- Wire Opening Detection for Thermocouple
- Isolation: 3000VDC

### Feature/Benefits
- 3000VDC isolated analog input
- 24bit sigma-delta ADC to provide excellent accuracy
- Thermocouple direct connect with built-in CJC
- Software calibration
- Dual Watchdog

### PIN Assignments

<table>
<thead>
<tr>
<th>Vin5+</th>
<th>Vin5-</th>
<th>Vin6+</th>
<th>Vin6-</th>
<th>Vin7+</th>
<th>INIT*/Vin7- (Y)</th>
<th>DATA+ (G)</th>
<th>DATA- (R)+Vs</th>
<th>(B)GND</th>
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### Thermocouple type : (C)

<table>
<thead>
<tr>
<th>Type</th>
<th>Range (C)</th>
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<tbody>
<tr>
<td>J</td>
<td>-210~+760</td>
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<tr>
<td>K</td>
<td>-270~+1372</td>
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<tr>
<td>T</td>
<td>-270~+400</td>
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<td>E</td>
<td>-270~+1000</td>
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<td>-270~+1300</td>
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<td>-200~+100</td>
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<tr>
<td>L2</td>
<td>DIN43710</td>
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<td>-200~+900</td>
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</table>
Block Diagram

RS-485 Connector
Asynchronous 2-wire half-duplex
Pluggable terminal block: Pitch 5.08mm

Baud Rate
1.2K/2.4K/4.8K/9.6K/19.2K/38.4K/57.6K/115.2K bps

Wire Connection
Analog Input Channel 0~5
Analog Input Channel 6~7
8 different mode

**INIT* mode**

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**Power Requirements**
Power input: +10~+30Vdc input

**Power Consumption**
1.2Watt for I-7019 & I-7019R

**Environmental**
Storage temperature: -25°C to 80°C
Operation temperature: -20°C to 75°C
Humidity: 5 to 95%, non-condensing

**Dimensions**: 120L x 72W x 33H cm
**Certification**: CE