0.25" Wide Signal Conditioners and Isolators

Represented by
Absolute Process Instruments Inc.
1220 American Way, Libertyville, IL 60048
800-942-0315
**K LINE**
Compact Signal Converters Isolators

**CONNECTION AND INSTALLATION**

- **SCREW TERMINAL CONNECTION**
- **K-BUS CONNECTOR**
- **INSERTING MODULE ON DIN GUIDE**
- **EXTRACTING MODULE FROM DIN GUIDE**

**POWER SUPPLY**
K Line signal conditioners can be powered 3 different ways.

1. Screw terminal block on the module.
   - Note that loop-powered modules do not use the bus system.
2. SMART SUPPLY bus system.
   - The SMART SUPPLY is based on the expandable K-BUS connector. Up to 16 devices can be connected to a single power supply as long as total current does not exceed 400 mA.
3. Distributed SMART SUPPLY bus system.
   - For 17 to 75 devices (1.5 A max current consumption) using external regulated power supplies.

**SMART SUPPLY SYSTEM**
Distributed supply with K-SUPPLY module and K-BUS (up to 75 modules)

**POWER ON SCREW TERMINALS**

**SMART SUPPLY SYSTEM**
Distributed supply with 2 slot connector K-BUS (up to 16 modules)

**Redundant supply**

**Multi-bus connection**

**Parallel input connection** (2 A output)
# 10 Good Reasons to Choose K-Line

- **Compact Size**
- **Best Accuracy**
- **Flexible Configuration Via DIP-Switches**
- **Isolation 3-Way**
- **Wide Operating Temperature Range**
- **Low Power Consumption**
- **International Standards**
- **Cost Effective**

## Specifications Table

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Measurement</th>
<th>Conversion Type</th>
<th>Channels</th>
<th>Other Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>K108UI</td>
<td>Analog mA, V</td>
<td>mA, V</td>
<td>1/1</td>
<td>19.2-30 Vdc, 1.5 kVac</td>
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<tr>
<td>K109S</td>
<td>Analog mA, V, sensor power supply</td>
<td>mA, V</td>
<td>1/1</td>
<td>19.2-30 Vdc, 1.5 kVac</td>
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<td>Analog mW</td>
<td>mA, V</td>
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<tr>
<td>K111</td>
<td>Digital/ Pulse</td>
<td>NPN, PNP, NPN, Reed, Photocell</td>
<td>PNP</td>
<td>1/2</td>
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<tr>
<td>K112</td>
<td>Digital/ Pulse</td>
<td>NPN, PNP, NPN, Reed, Photocell</td>
<td>PNP, NPN</td>
<td>1/2</td>
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<tr>
<td>K107A</td>
<td>Serial RS485</td>
<td>RS485</td>
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<tr>
<td>K107B</td>
<td>Serial RS232</td>
<td>RS485</td>
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<td>Serial USB</td>
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<td>Temperature</td>
<td>RTD</td>
<td>1/1</td>
<td>external/ by loop</td>
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<tr>
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<td>RTD</td>
<td>1/1</td>
<td>external/ by loop</td>
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<tr>
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<td>RTD</td>
<td>1/1</td>
<td>external/ by loop</td>
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<tr>
<td>K120RTD</td>
<td>Temperature</td>
<td>RTD, Ni100</td>
<td>1/1</td>
<td>external/ by loop</td>
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<tr>
<td>K109TC</td>
<td>Temperature</td>
<td>TC, EX, RTD, Ni100</td>
<td>mA, V, relay</td>
<td>1/2</td>
</tr>
<tr>
<td>K121</td>
<td>Universal mA, V, Ohm, TC, RTD, Ni100, Pr100, Pr500, Pr1000</td>
<td>mA</td>
<td>1/1</td>
<td>external/ by loop</td>
</tr>
</tbody>
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## Company Information

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API maintains a constant effort to upgrade and improve its products. Specifications are subject to change without notice. Consult factory for your specific requirements.