The PX-314 Analog Input Terminal provides four electrically isolated -10 to +10 VDC inputs with 12-bit resolution and LED status. Use with the Protos X™ I/O System.

**General Specifications**
- **Operating Temperature**: 32° to 131°F (0° to 55°C)
- **Storage Temperature**: 13° to 185°F (-25° to 85°C)
- **Relative Humidity**: 5% to 95%, non-condensing
- **Environment Air**: No corrosive gases permitted
- **Mounting/Orientation Restrictions**: 35mm DIN rail/None
- **Vibration**: conforms to EN 60068-2-6
- **Shock**: conforms to EN 60068-2-27, EN 60068-2-29
- **Noise Immunity**: conforms to EN 61000-6-2/ EN61000-6-4
- **Protection Class**: IP20
- **Weight**: 75g
- **Dimensions (WxHxD)**: 12 x 100 x 68.8 mm (0.47 x 3.94 x 2.71 in)
- **Agency Approvals**: UL File No. E157382, CE

**Input Specifications**
- **Number of Channels**: 4
- **Input Ranges**: -10 to +10 VDC
- **Resolution**: 12 bits (11 bits between 0 to 10 VDC)
- **Input Type**: Single-ended
- **Data Format**: PX-MOD: 8-bytes input
- **Data Bytes Consumed**: PX-TCP1/TCP2: 16-bytes input/16-bytes out (not used)
- **Input Power Source**: Voltage source external
- **Current Consumption (from Terminal Power Bus)**: NA
- **Input Impedance**: > 130kΩ
- **Absolute Max Ratings**: 30VDC surge
- **Conversion Time**: Approx. 2ms
- **Full Scale Calibration Error**: ± 0.3% of full scale
- **Current Consumption (from I/O Bus)**: 100mA
- **Electrical Isolation**: 500Vrms (I/O bus/field potential)
- **Heat Dissipation**: 1W max.
- **Adjacent Mounting on Bus Terminals with Power Contact**: Yes, DC only
- **Adjacent Mounting on Bus Terminals without Power Contact**: No
- **Passes Terminal Bus Power**: Yes
- **Passes PE Bus**: No
- **Status Indicators**: 4, indicates I/O Bus activity

**Physical Specifications**
- **Dimensions**: 12 x 100 x 68.8 mm (0.47 x 3.94 x 2.71 in)
- **Agency Approvals**: UL, CE

**Contact Information**
- **Tech Support**: 770-844-4200
- **Sales**: 800-633-0405
- **Website**: www.automationdirect.com
**HOT SWAP NOT PERMITTED**
Always remove power from the system before inserting or removing bus terminals or couplers as failure to do so could cause malfunction or damage to the terminals, couplers or other connected devices.

**WIRING CONNECTION**
Wire connection is made through a spring clamp style terminal. This terminal is designed for a single-conductor solid or stranded wire. Wire connection is made by firmly pushing the screwdriver into the screwdriver slot, inserting the wire into the wire slot and removing the screwdriver, locking the wire into position.

**Table: Wiring Specifications**

<table>
<thead>
<tr>
<th>Connection Type</th>
<th>Spring Clamp Terminals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wire Gauge / Wire Cross Section</td>
<td>28-14 AWG / 0.08 - 2.5mm²</td>
</tr>
<tr>
<td>Screwdriver Width</td>
<td>2.5mm (0.10) such as our TW-SD-MSL-2</td>
</tr>
<tr>
<td>Wire Stripping Length</td>
<td>8mm</td>
</tr>
</tbody>
</table>

**INSERTION**
For system assembly, first attach a bus coupler by snapping onto 35mm DIN rail and securing into position using the DIN rail locking wheel (where applicable) located on the left side of the coupler. To add a bus terminal, insert unit onto right side of bus coupler using the tongue and groove at the top and bottom of the unit, pressing gently until it snaps onto the DIN rail. A proper connection cannot be made by sliding the units together on the DIN rail. When correctly installed, no significant gap can be seen between the attached units. Bus connection is made through the six slide contacts located on the upper right side of the units. Add up to 64 bus terminals per bus coupler, including a bus end terminal.

**REMOVAL**
A locking mechanism prevents individual units from being pulled off. For bus terminal removal, pull the orange DIN rail release tab firmly to unlatch the unit from the rail. If attached to other terminal units, slide unit forward until released. For bus couplers with locking wheels, release the DIN rail locking wheel, then pull firmly on DIN rail release tab.

**MOUNTING**
For complete assembly instructions and compatibility between terminals see the PX-USER-M manual available for free download at www.automationdirect.com.