The JNIOR Model 410 is the newest member of the JNIOR family of I/O modules. With "Advanced Capabilities", the JNIOR 410 brings cost-effective and seamless connectivity and control, with web and IT friendly features, to a small amount of process signals for integration over the Ethernet network with a variety of asset management applications.

The JNIOR 410 contains a built-in controller, a 10/100 Ethernet port, a mix of I/O signals, built-in web pages for easy configuration, monitoring and manual control, ability to communicate simultaneously to multiple devices, communication drivers for integrating with remote applications (TCP/IP, DLL, OPC Server), IT tools, flash file system, remote firmware upgrades, logging capabilities, sensor port, I/O expansion, rugged packaging and industry certification.

ADVANCED FEATURES

- 32-bit Microprocessor
- 2 MB Battery Backed RAM
- 16 MB Flash (Optional: 32 MB or 64 MB Flash)
- Blocks of Immutable Memory: up to 64k each
- 8 - Optically isolated inputs
- 8 - Dry contact relay outputs
- 12 to 24 Volts DC or AC
- RS232 port for configuration and interacting with serial devices
- Usage meters (timers) for each input and output
- Inputs double as counters handling up to 2,000 counts per second per input
- Latching of input signals
- I/O “Slave” – outputs follow I/O on the same or different JNIOR
- Dual alarm levels for each counter input
- Configure unique e-mail address per alarm point
- Sensor Port for I/O expansion and configuration screen
SPECIFICATION

System Software

The JNIOR 410 comes complete with all the software needed to configure, monitor and integrate your I/O. The user interface and configuration screens run in a standard web browser and can be viewed from any computer on the network (or via the Internet) because the software is stored on the JNIOR.

The JNIOR can also be integrated with your business or process control applications via standard TCP/IP communications, Modbus/TCP commands and/or the included OPC Server.

A software package capable of interacting with one or many JNIORS is also provided for easy software upgrades. The software upgrade will automatically be stored in flash memory.

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Item</th>
<th>Catalog No.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>JNIOR Model 410</td>
<td>JNR-100-004B</td>
<td>Main Unit</td>
</tr>
<tr>
<td>Power Supply</td>
<td>PSA-120-125</td>
<td>Optional</td>
</tr>
<tr>
<td>DIN RAIL Adapter</td>
<td>DIN-300-001</td>
<td>Optional</td>
</tr>
</tbody>
</table>

Power Supply
- Recommended: 12 to 24 Volts DC or AC
- At 500 mA (minimum)

Digital Inputs
- Range: 0 to 30 Volts AC/DC
- Logic Low Input: 0 to 1 Volt
- Logic High Input: 2 to 30 Volts
- Input Resistance: 1.2 K ohm nominal
- Isolation: Optically Isolated
- Counter Capability: 2 KHz Max each input, whether using 1 or all 8 inputs
- Functions: Latching Capability
- Response Time: 1 millisecond

Relay Outputs
- Range: 0 to 30 Volts AC/DC
- Type: SPST, Form A, 1 Normally Open
- Contact Ratings: 1 Amp @ 24 Volts AC/DC
- Pulse Resolution: 1 millisecond

Sensor Port
- Applications: RJ-11 port for connecting 1-Wire temperature sensors and I/O expansion modules

I/O Slaving
- Feature: Each output can be “slaved” to follow an input (“master”) on “any” JNIOR so that the output signal is based on an input and/or to provide relaying of input signals to minimize wiring runs

Installation
- Wiring: 2-piece connectors for wiring
- Mounting: Tabs with DIN-rail option available

Physical
- Dimensions: 6 x 4 x 1.2 in. (152 x 102 x 31 mm)
- Weight: 11 ounces (312 grams)

RS 232 Serial Port
- Baud Rate: 115,200 baud
- Data Bits: 8
- Parity: None
- Stop Bits: 1
- Flow Control: None
- Connection: DB9 female with 9 pin DTE pin out

RS485 Serial Port
- Communication: Configurable based on application
- Wiring: 2-Wire or 4-Wire
- Connection: 5 pole, 2 piece connector

Ethernet Port
- Speed: 10/100 Auto-Negotiate, Full Duplex
- Connection: RJ-45 Connector

Environment
- Operating Temp: -15°F to 160°F (-25°C to 70°C)
- Storage Temp: -40°F to 185°F (-40°C to 85°C)
- Humidity: 5 to 95% Non-Condensing

Certification
- World-Wide Safety and EMI/EMC Approvals: - TUV Safety Mark (IEC, EN 60950)
- - CE Mark
- - FCC Class B (includes Class A)
- - CB Scheme Available
- - Case: Flame Retardant ABS Plastic

Warranty
- Hardware: 2 years
- Software: 2 years with upgrades (as available)