**DeviceNet Scanner / Slave Module**

**PTQ-DNET**

The DeviceNet Scanner/Slave Module is an interface between DeviceNet slave devices and a Schneider Electric Quantum platform processor.

DeviceNet is a low-level network that provides connections between simple industrial devices (sensors, actuators) and higher-level devices (controllers). DeviceNet is based on the Common Industrial Protocol (CIP) and shares all the common aspects of CIP with adaptations to fit the message frame size of DeviceNet.

The DeviceNet Scanner/Slave supports complete specifications according to CAN bus and ISO 11898 standards and the Common Industrial Protocol (CIP) for the upper layers of their network protocol.

**Features and Benefits**

- Allows connection for a single DeviceNet network
- Connect up to 63 slave devices
- Supports either Scanner or Slave modes
- Supports Auto Device Replacement (ADR); consists of Node Recovery and Configuration Recovery
  - Node Recovery - this feature causes the node number of the replacement device to be automatically changed to the node number of the original device. The replacement device's node number must be writable over the DeviceNet network and must initially be set to 63
  - Configuration Recovery - this feature causes the replacement device's configuration to be made identical to the original device. The replacement device's configuration must be writable over the DeviceNet network. Configuration Recovery files are stored in the master scanner that is communicating with the original device through RSNetWorx for DeviceNet
- Provides processor module status and access to scanner network diagnostic tables such as node idle, node status, and node fault information
- Acts as an I/O data server for explicit peer-to-peer messaging
- DeviceNet bandwidth can be saved by not transferring I/O values unless a change-of-state (COS) has occurred
- DeviceNet transfer of I/O data can be scheduled (cyclic data)

**General Specifications**

- Single Slot - Quantum backplane compatible
- The module is recognized as an Options module and has access to PLC memory for data transfer
- Configuration data is stored in non-volatile memory in the ProTalk module

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**How to Contact Us: Sales and Support**

All ProSoft Technology® products are backed with unlimited technical support. Contact our worldwide Technical Support team directly by phone or email:

**Asia Pacific**
+603.7724.2080, asiapc@prosoft-technology.com
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www.prosoft-technology.com
• Rockwell Automation's RSNetWorx for DeviceNet Configuration Software is supported. (Available from ProSoft Technology as Part Number PSW-RSNetWorx-DNET)
• Up to six modules can be placed in a rack
• Local rack - The module must be placed in the same rack as processor.
• Compatible with common Quantum / Unity programming tools.
• Quantum data types supported: 0x, 1x, 3x, 4x
• High speed data transfer across backplane provides quick data update times.
• Sample function blocks available.

Hardware Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Consumption</td>
<td>DeviceNet Current Load: 50 mA (max.)</td>
</tr>
<tr>
<td></td>
<td>Backplane Current Load: 0.8A @ 5V dc max.</td>
</tr>
<tr>
<td>Communication Rates</td>
<td>125 Kbits/s, 250 Kbits/s, 500 Kbits/s</td>
</tr>
<tr>
<td>Messaging Capabilities</td>
<td>Master: Poll, strobe, COS, or cyclic</td>
</tr>
<tr>
<td></td>
<td>Explicit: Initiate and respond</td>
</tr>
<tr>
<td>Isolation</td>
<td>Optical isolation between: Backplane and channel 1</td>
</tr>
<tr>
<td></td>
<td>1 MΩ resistor from Channels 1 to chassis</td>
</tr>
<tr>
<td>Immunity Radiated Fields</td>
<td>10V/m, 27…1000 MHz</td>
</tr>
<tr>
<td>Module Location</td>
<td>Quantum local I/O chassis</td>
</tr>
<tr>
<td>Network Address</td>
<td>00 to 63</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0 to 60°C (32 to 140°F)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40 to 85°C (-40 to 185°F)</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>5% to 95% (non-condensing)</td>
</tr>
<tr>
<td>Vibration</td>
<td>Sine vibration 4-100 Hz in each of the 3 orthogonal axes</td>
</tr>
<tr>
<td>Shock</td>
<td>30G, 11 mSec. in each of the 3 orthogonal axes</td>
</tr>
<tr>
<td>Dimensions (HxWxD),</td>
<td>250 x 103.85 x 40.34 mm</td>
</tr>
<tr>
<td>Approx.</td>
<td>9.84 x 4.09 x 1.59 in</td>
</tr>
<tr>
<td>Weight</td>
<td>0.9 kg (1.9 lb)</td>
</tr>
<tr>
<td>Certifications</td>
<td>UL, CE, C-Tick, CSA Class I Div 2 Hazardous</td>
</tr>
</tbody>
</table>

Additional Products

ProSoft Technology offers a full complement of hardware and software solutions for a wide variety of industrial communication platforms. Visit our web site at http://www.prosoft-technology.com for a complete list of products, including:

- **PTQ-DFNT** EtherNet/IP Client/Server Communication Module.
- **PSW-RSNetWorx-DNET** RSNetWorx for DeviceNet Configuration Software (Rockwell Automation part number 9357-DNETL3)
- **PSFT-1788-EN2DN** Ethernet to DeviceNet bridge (RA part number A 1788-EN2DN)

Ordering Information

To order this product, please use the following:

- **PTQ-DNET** DeviceNet Scanner/Slave Communication Module

  The PTQ-DNET DeviceNet module set in scanner mode requires configuration software not included with the module but available from ProSoft Technology. Please see part number PSW-RSNetWorx-DNET and PSFT-1784-PCD data sheets for additional information.

  To place an order, please contact your local ProSoft Technology distributor. For a list of ProSoft distributors near you, go to http://www.prosoft-technology.com

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