

Direct-Link™ PROFINET Multi IO-Device driver is the best choice to share process data between a PC-Based system and PROFINET controllers.

Direct-Link™ Multi IO-Device

PROFINET Multi-Slave Driver for PC-Based Windows applications



Direct-Link™ PROFINET Multi IO-Device is a Windows 32-bit software driver (library DLL) that allows a user to develop applications to connect a PC-based system to PROFINET network. With the product, your PC behaves as a slave I/O device on the PROFINET.

The product is using standard Ethernet communication port(s) of the PC to exchange real-time data with PROFINET IO-Controller(s). Typically the solution is used to share process data between PC based visualization system (HMI, Scada, and Control Panel) and a PROFINET IO-Controller. Operator can monitor online diagnostic and send operator commands. This is important for the availability and the stability of the whole system.

The uniqueness of the solution is also the capability to emulate up to 32x IO-Devices at the same time using a single PC platform that permits to design industrial applications like: Slave IO simulation to test systems and machines controlled by DCS/PLC, tests bench for PROFINET controller development/production.

The product software suite includes a graphical configuration tool to setup the IO-Device parameters (name, IP address, slots, data type, etc). A GSD file is provided to be imported into the IO-Controller engineering tool. The software package includes development libraries to access IO-Device memory mapping (Input, Output, Alarms, Status, etc) and browse process variables by name.



Direct-Link™
PROFINET Multi IO-Device

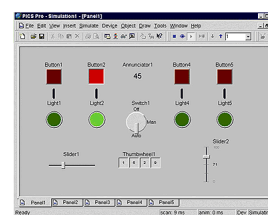
FEATURES AND BENEFITS

- Connect a PC under Windows to PROFINET network
- Use standard PC Ethernet port(s)
- Support PROFINET IO Real-Time (RT) communication according PROFINET v2.2 specifications
- Support multi-slave functionality; Emulate up to 32x IO-Devices connections on a single PC by using multiple Ethernet ports
- Compatible with Windows 32-bit: Seven, 2008 Server, Vista, 2003 Server, XP
- Includes graphical configuration console and diagnostic tool
- Allow to define and start a user application after running the Multi IO-Device driver
- Support PROFINET Alarms
- Product package includes Windows development library (DLL); compatible with applicomIO fieldbus cards to allow a user switching to Multi IO-Device solution



APPLICATIONS

- Visualization system; Data exchange of I/O process data between a PROFINET controller and a PC-Based visualization system (HMI / Scada / Supervision).
- Operator panel interface; Allows an operator to send commands through a PC panel.
- Data Sharing / Data Concentrator; Low cost solution to share I/O process data between multiple distinct PROFINET networks using multi-slave capability.
- Tests bench; Can be used to fully load PROFINET controller connections or to make benchmarking instead of buying expensive real devices.
- Device I/O simulation; When used in conjunction of I/O simulation software, the product can emulate multiple PROFINET slave devices to test control systems (PLC, DCS, Scada, etc) before to go online.



- Device I/O simulation -



- Operator panel interface -



- Test bench -



- Visualization Systems -

SPECIFICATIONS

Product Information

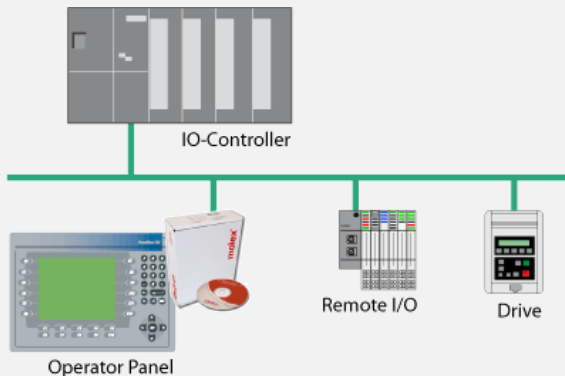
Product Package

- Engineering Tools
 - Configuration console
 - Manage multiple user projects (Import/Export)
 - Hide/Show PROFINET production status in I/O device memory
 - Multi IO-Device application engine
 - IO-Device diagnostic view
 - Log view
- Electronic documentation including example of integration into Siemens Step7™
- Development Libraries:
 - MS Visual (C#/VB/C++/C)
 - Borland / Delphi
- Supported Windows platforms (32-bit): Seven, 2008 Server, Vista, 2003 Server, XP
- Software Key protection

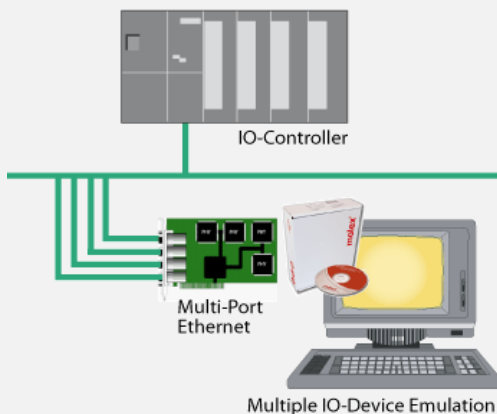
Protocol Specifications

- PROFINET IO RT Class-1
- Minimum refresh period: 32ms (Windows limitation)
- Conform to PROFINET IO v2.2 specifications
- Emulate up to 32x PROFINET IO-Devices (Slave)
- Support up to 1438 bytes Input and 1438 bytes Outputs process data per IO-Device context
- Support up to 64 modules (slot) Input or Output per IO-Device context
- Support PROFINET Alarms
- Process data format: Little Endian (Intel)

- Typical Architecture -

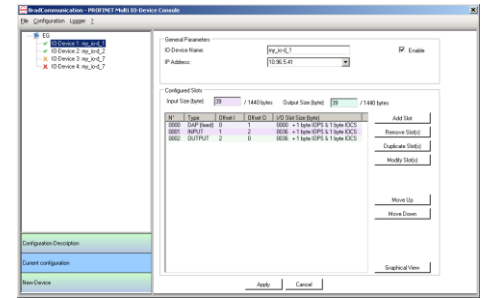


- Multi IO-Device Architecture -

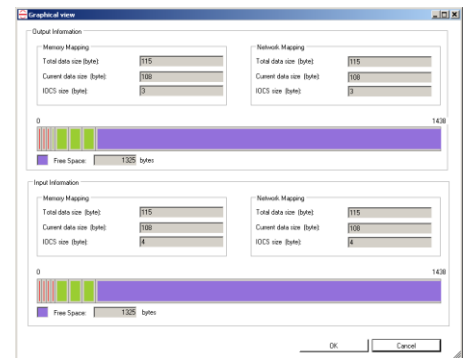


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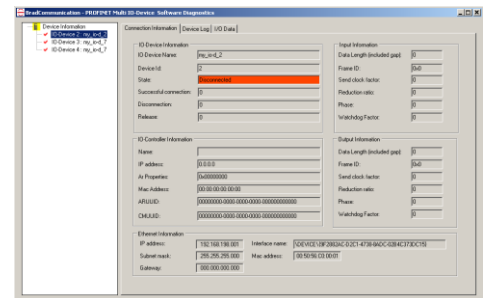
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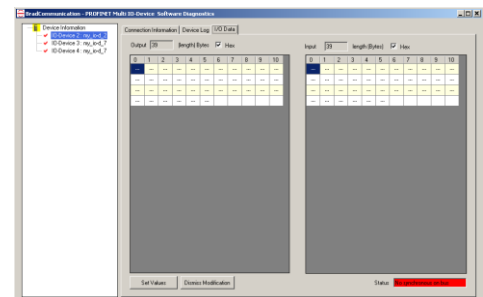
- Configuration Console -



- Device I/O mapping view -



- IO-Device diagnostic view -



- IO-Device process data view -

ORDERING INFORMATION

Order No.	Engineering No.	Description
112027-5027	DRL-EPN-SWF-S	Direct-Link PROFINET Multi IO-Device driver for Windows

Also available in Molex product portfolio: PROFINET IO-Controller and IO-Device protocol stacks, PROFINET network interface card.

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North America: US: +1 (630) 969-4550 – Canada: +1 519 725 5136
 Europe: France: +33 2 32 96 04 20 – Germany: +49 7252 94 96 0 – Italy: +39 (02) 950551 – UK: +44 (1252) 720720
 Asia: China: +86 21-5048-0889 – Singapore: +65 6-268-6868 – Japan: +81 46-265-2325 – Korea: +82 31-492-9000

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