



# PD 602 DPI with Ethernet LAN Interface



# Features

## ■ General:

- A PD 602 DPI is used to provide programmable intelligence for the local cluster via Light-Link P-NET, and to provide an interface with local area networks (LAN) using the Ethernet electrical standard (10 Mb/s).

## ■ PD 602 DPI, 2 P-NET Communication Channels:

- Channel 1: P-NET Ethernet channel connecting DPI to LAN.
- Channel 2: P-NET Light-Link channel for communicating with locally mounted P-NET by using the optical Light-Link interface.



# Base and electronic module

- BM 003 Base module:



- PD 602 DPI electronic module:





# Specification

## ■ Special features:

- Remote access using the Internet.
- Secure port with password.
- Wireless LAN compatible.

## ■ Cable and electrical specification:

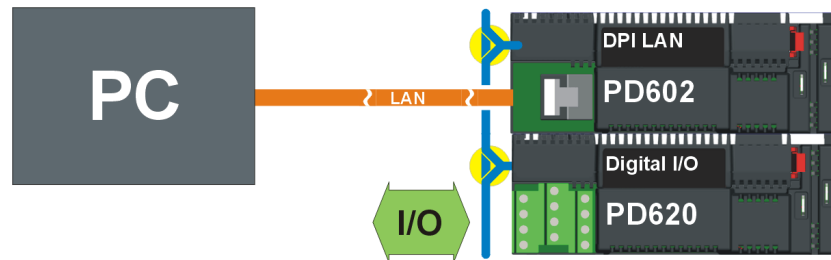
- Bus structure: Physical star (LAN switch must be used).
- Medium: Cat 5. UTP cable.
- Bus Length: Max. 100 metres.
- Number of nodes per bus segment: 100 nodes.
- Communication speed: 10/100 Mbit/s.
- 1000 transmissions/s.



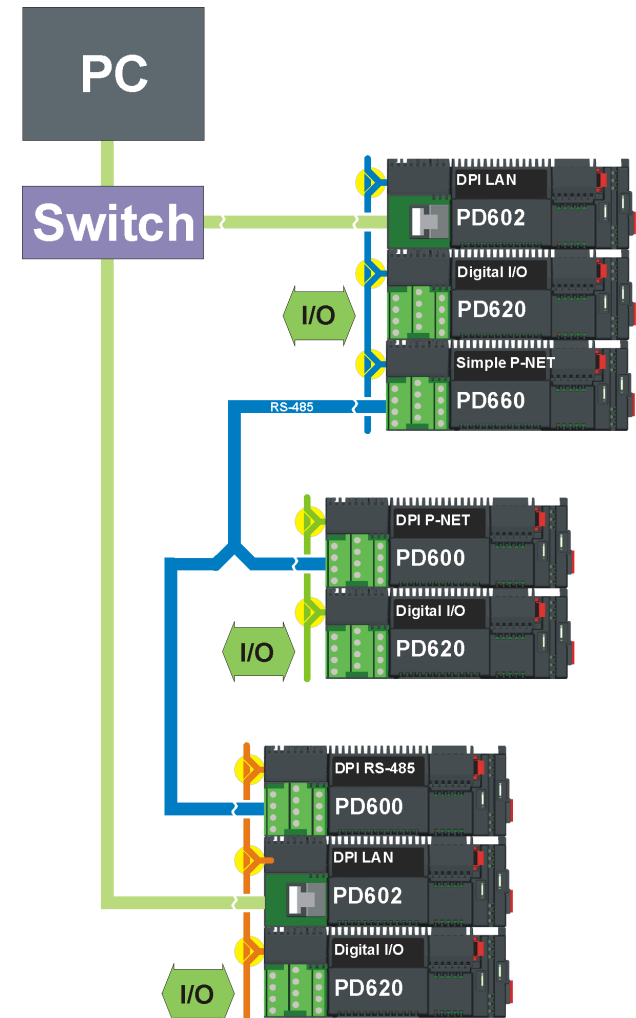
# Installation

## ■ Principle diagram :

- Connecting a PC directly to PD 602 DPI.



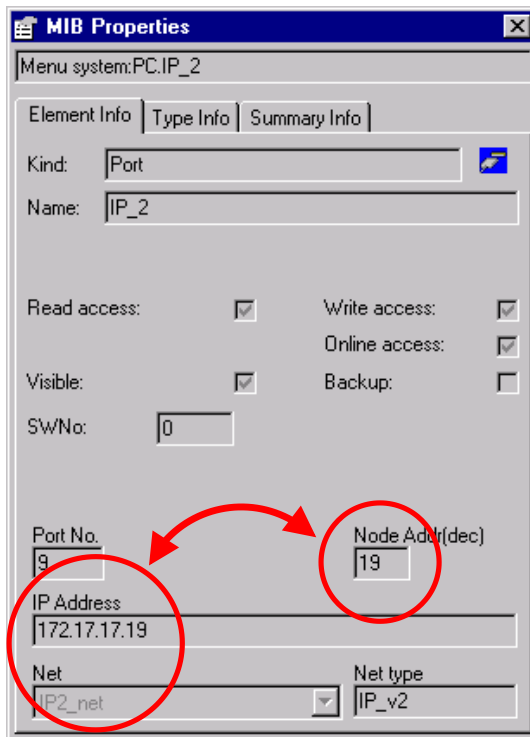
- Building a network.





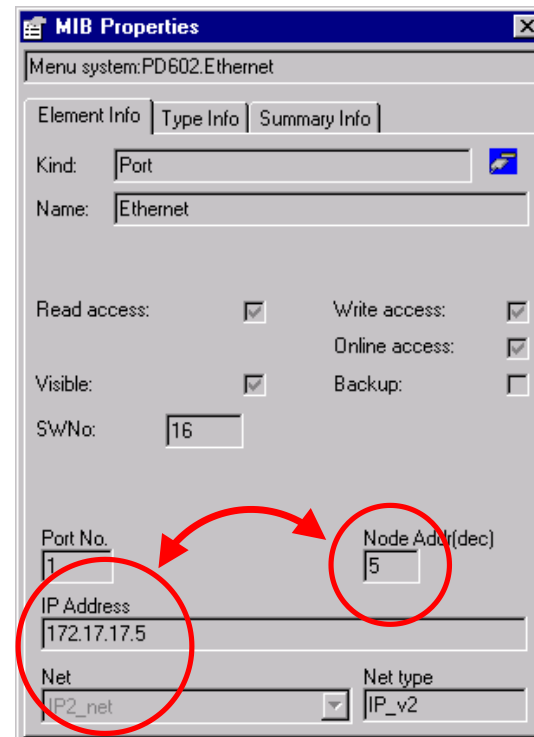
# VIGO Configuration

- PC configuration:



The screenshot shows the 'MIB Properties' dialog box for a PC configuration. The 'Menu system' is 'PC.IP\_2'. The 'Kind' is 'Port' and the 'Name' is 'IP\_2'. The 'Read access', 'Write access', and 'Online access' checkboxes are checked. The 'Visible' checkbox is checked, and 'Backup' is unchecked. The 'SWNo' is '0'. The 'Port No.' is '9' and the 'Node Addr(dec)' is '19'. The 'IP Address' is '172.17.17.19'. The 'Net' is 'IP2\_net' and the 'Net type' is 'IP\_v2'. Red circles highlight the 'IP Address' and 'Node Addr(dec)' fields, with a red arrow pointing from the IP address to the node address.

- PD 602 DPI configuration:



The screenshot shows the 'MIB Properties' dialog box for a PD 602 DPI configuration. The 'Menu system' is 'PD602.Ethernet'. The 'Kind' is 'Port' and the 'Name' is 'Ethernet'. The 'Read access', 'Write access', and 'Online access' checkboxes are checked. The 'Visible' checkbox is checked, and 'Backup' is unchecked. The 'SWNo' is '16'. The 'Port No.' is '1' and the 'Node Addr(dec)' is '5'. The 'IP Address' is '172.17.17.5'. The 'Net' is 'IP2\_net' and the 'Net type' is 'IP\_v2'. Red circles highlight the 'IP Address' and 'Node Addr(dec)' fields, with a red arrow pointing from the IP address to the node address.



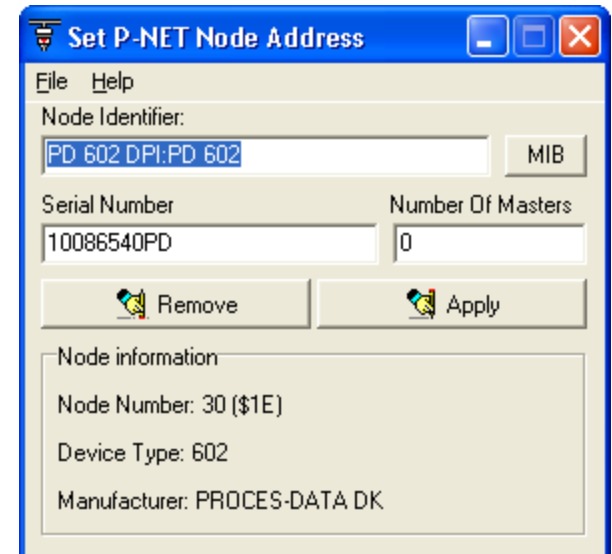
# VIGO Configuration

## ■ Set P-NET Node address:

- Setting the node address in the module.

## ■ Example:

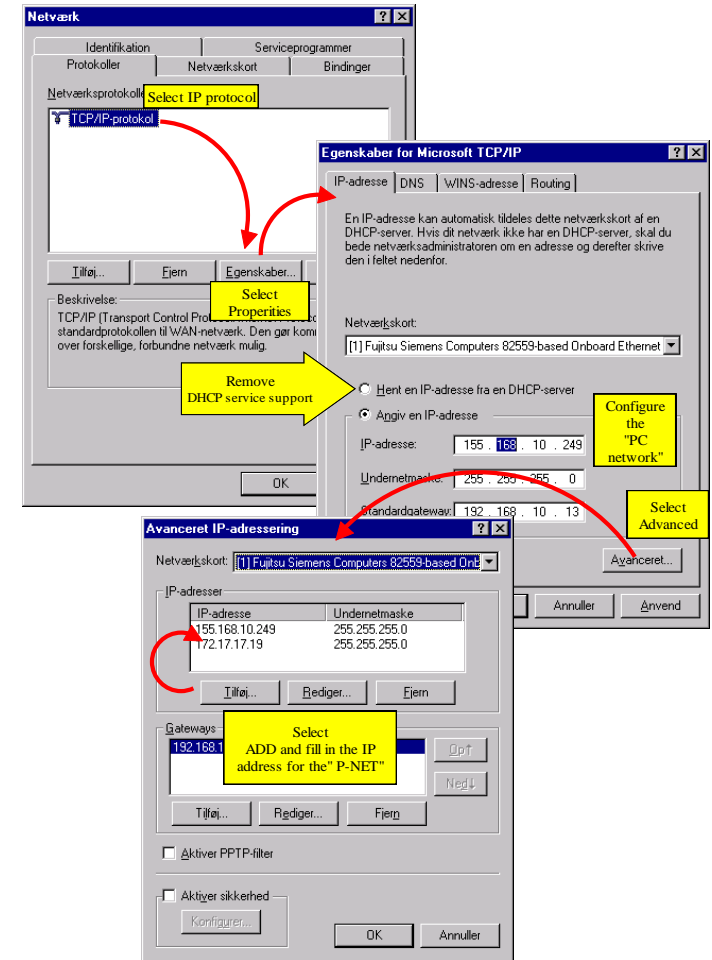
- 172.17.17.xx
- Key in serial Number and press Apply
- Node number : 30
- 172.17.17.**30**
- **The parameter Number of Masters is not used on Ethernet.**





# PC Configuration

- **TCP/IP protocol:**
  1. Select IP protocol.
  2. Remove DHCP service support.
  3. Configure the PC network.
  4. Select advanced.
  5. Add and fill in the IP address for the "P-NET".
  
- Add 172.17.17.19





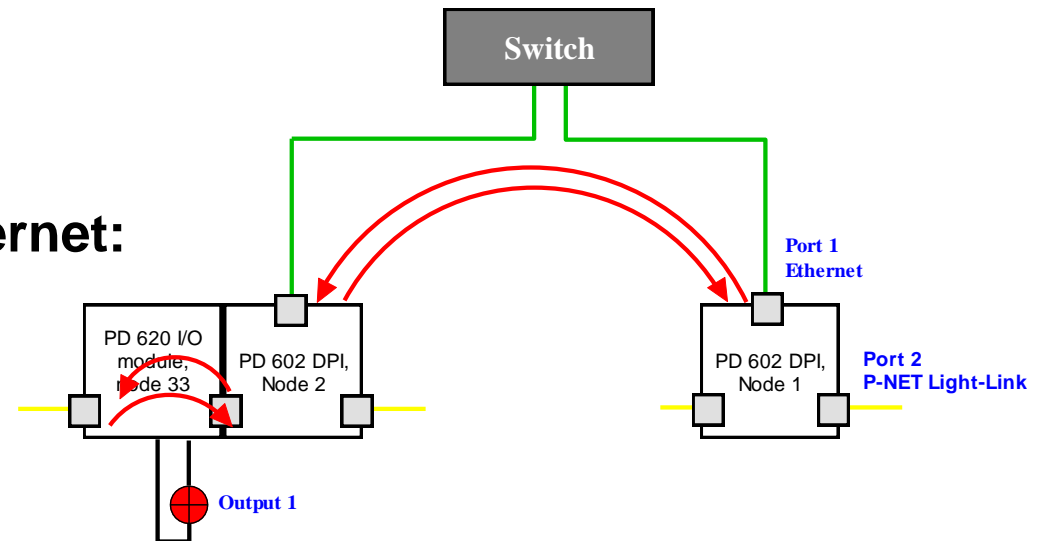


# Communication

## ■ General:

- When using Ethernet the P-NET protocol is used and Ethernet is used as a transportation media for P-NET packets.

## ■ Process-Pascal DPI to slave module using Ethernet:

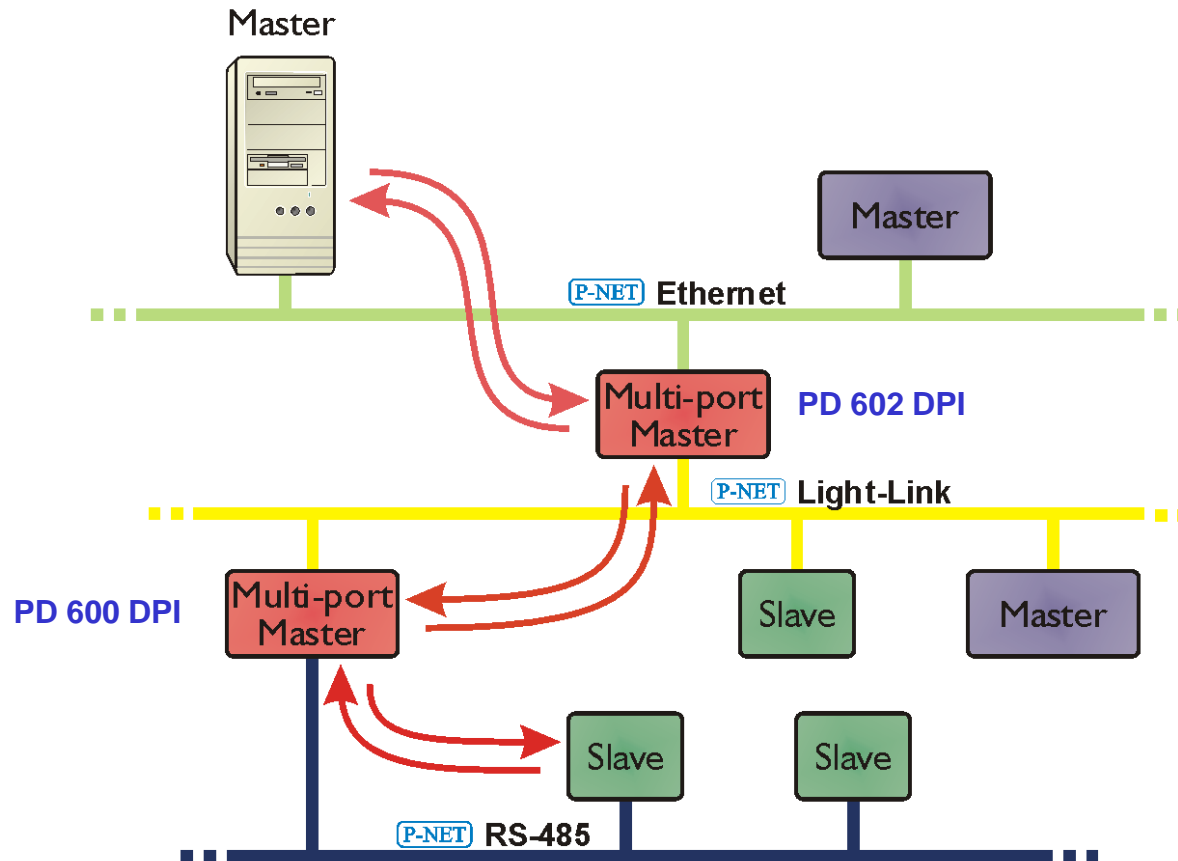


- MyPD620 : PD620 AT NET:(1,1,1,2,2,33) NAME : 'PD 620';
- Output1 -> MyPD620.Digital\_IO\_1.Flagreg[7] NAME : 'Output1';

{... AT NET:(Port no., Net no., Net No., Node no., Port no., Node no.) }



# Transparent Access using Multi-Port Master





# Multi-Net

