



Module Name	AB7000 & 017504	Project No
Document ID	-	Revision 1.00
Issued by	Patrik Lansdorf	Date 2005-04-14
Approved by	Martin Falkman	Page 1(12)

Subject  
Application note for Anybus communicator PDP and

# Settings for the Anybus communicator PDP and Profibus DP master simulator

## Application Note

Rev. 1.00



### About this application note:

This application note describes how to configure a Profibus master simulator together with an Anybus communicator PDP module. The content describes step by step how to setup the system.

This document assumes that the reader is familiar with industrial communication, Profibus networks and HMS Gateways.



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## History

Revision	Date	Description	Responsible
1.00	2005-07-05	Created	Patrik Lansdorf



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## 1 Requirements

Description	Name / Type
Anybus Communicator for Profibus	AB7000 / ABC-PDP
Profibus Master simulator	017504
D-SUB contact with a LED on pin 2 & 3	n.a.
Power supply 24V DC	n.a.
Profibus master simulator software	3.0c or later
Null modem cable	n.a.
Configuration cable for Anybus Communicator	017620
ABC config Tool	2.14 or later

Note: The gsd file for the Anybus Communicator is not required for the Profibus master simulator software.

## 2 System configuration

Below you find an overview of the system configuration that is described in this document.

Other nodes may be attached to the network, but are not necessary. Since the scope of this application note is to use one Profibus node only (Anybus communicator PDP), only the configuration below will be explained.

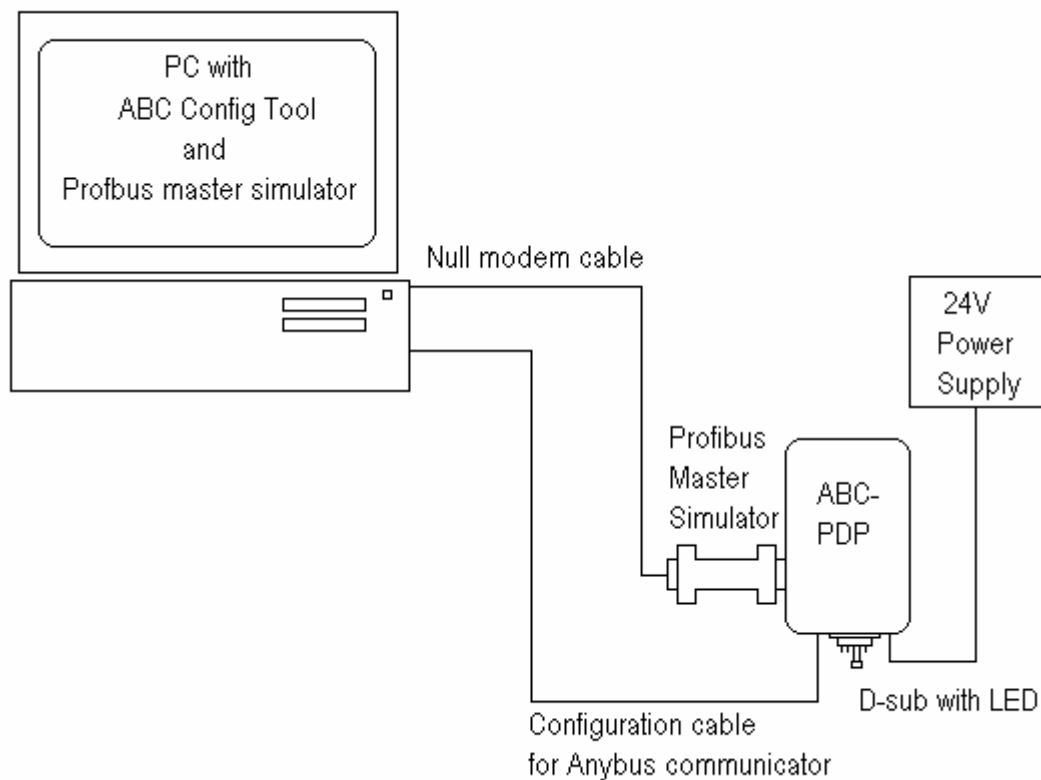


Figure 1. Hardware connection overview

In this application it will be possible to follow the data from the Profibus Master Simulator to the Output data area via the LED on the D-sub to the Input data Area and back to the Input data of the Profibus Master Simulator.



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## 2.1 Hardware Settings

### 2.1.1 Slave settings

The address setting is done with the two rotary switches on the Anybus Communicator module.  
Set the address to #2 for the Anybus Communicator. (Bottom switch=0 and top switch=2)



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## 2.2 Software configuration

### 2.2.1 Configuration for the Anybus communicator

Start up the ABC Config Tool and cancel the use of the wizard. Select which communication port to use, as shown in the picture below.

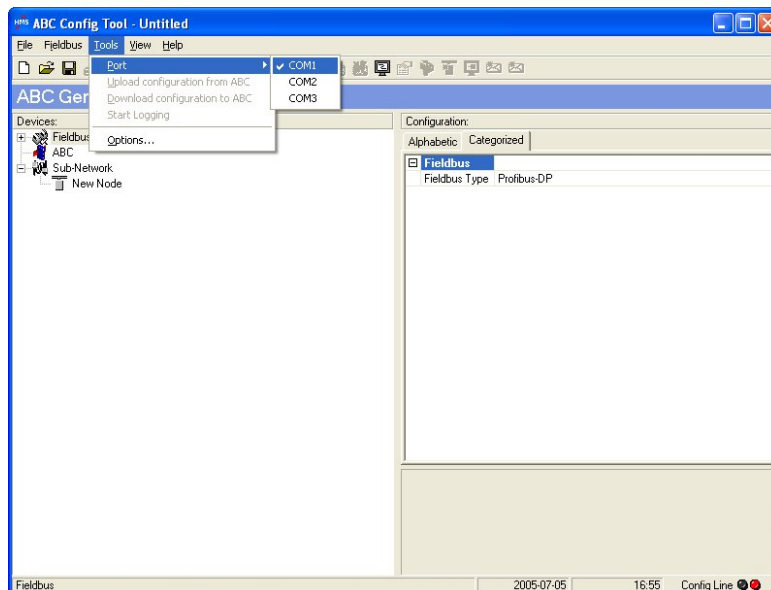


Figure 2. Com. Port selection

Open the file Loopback\_data.cfg, which is located in the zip file and press thereafter on the connect button, shown in the picture below or go to section 2.2.1.1 to create the configuration from scratch.



Figure 3. Connect

Download the configuration to the Anybus Communicator, by pressing the button shown below.

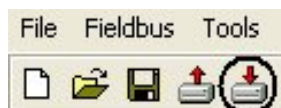



Figure 4. Download configuration

The configuration will loop 8 Bytes of data from the Output data (Tx) to the input data (Rx) of the Anybus Communicator. The configuration will work on any type of Anybus Communicator, except LonWorks.

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### 2.2.1.1 Configuring the Anybus communicator

The Gateway can be configured to use either ModbusRTU or ASCII protocol. In this case we are using the ASCII protocol, since we want to loop data. Therefore select Generic Data Mode, as show below.

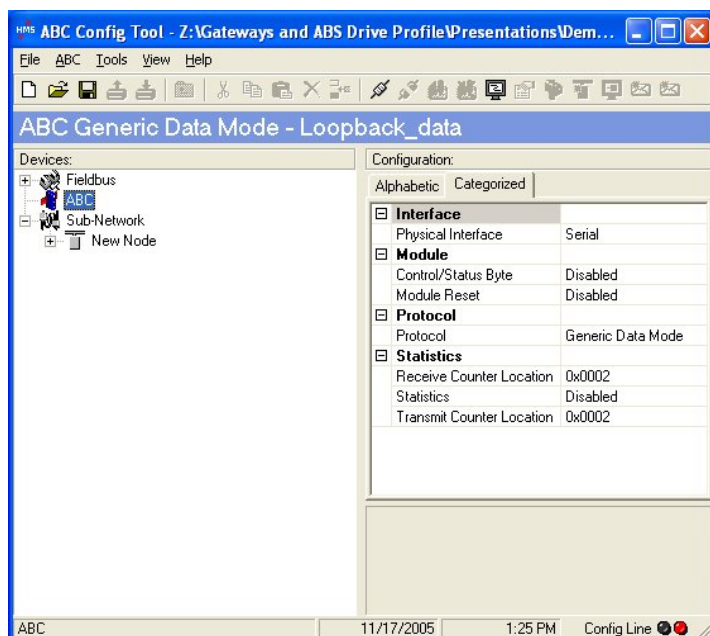


Figure 5. Generic Data Mode

Next configure the Sub-Network as below, since the scoop is to loop data, use RS232.

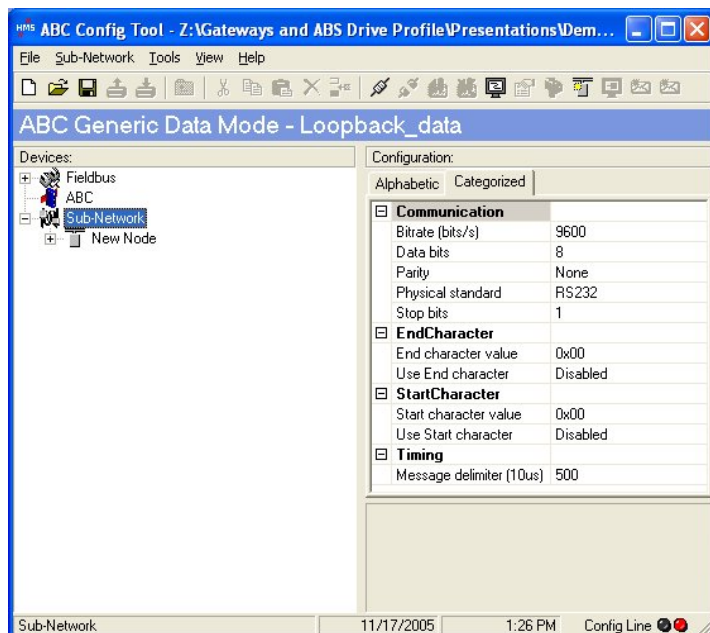


Figure 6. Sub-network





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Highlight the “New Node” and add one Transaction Produce and one Consume. In both transactions, add an data object and set them to 8 bytes, as the picture below.

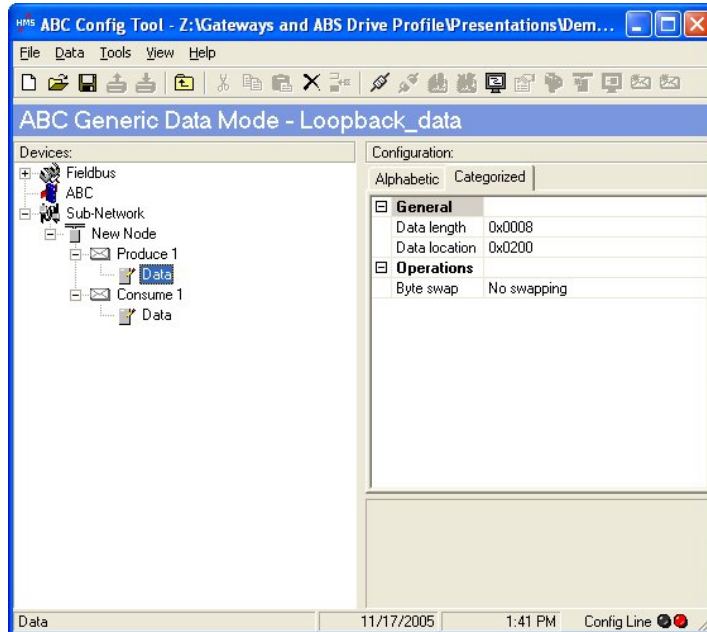


Figure 7. Transactions

## 2.2.2 Configuring the Profibus Master Simulator

Start up the Profibus DP Master Simulator and select which communication port to use, as shown in the picture below.

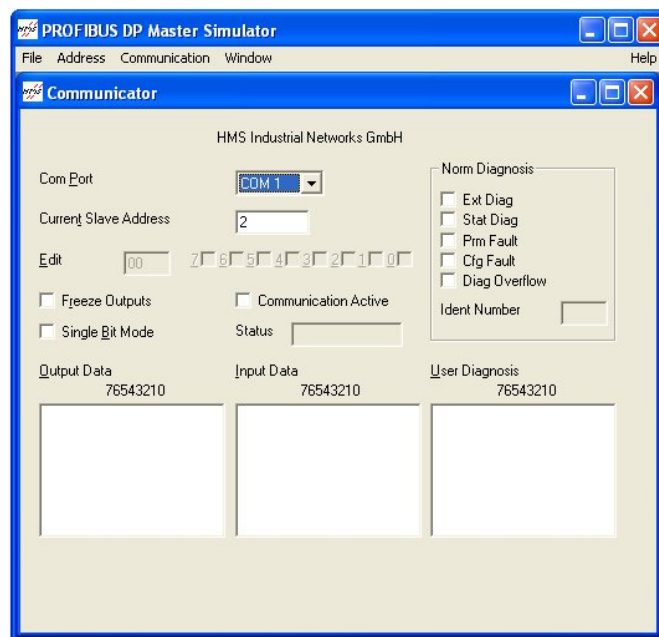


Figure 8. Master simulator properties



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### 3 Testing

Select Easy Start from the Communication Menu in the Profibus master simulator software, as shown below.

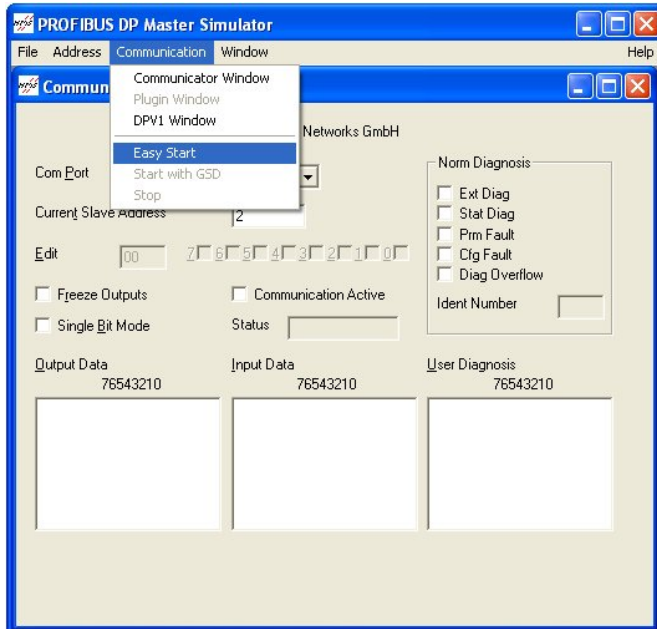


Figure 9. Start Communication

Now it should be possible to enter values in the Output Data and the data should be displayed in the In Data, as shown in the picture below.

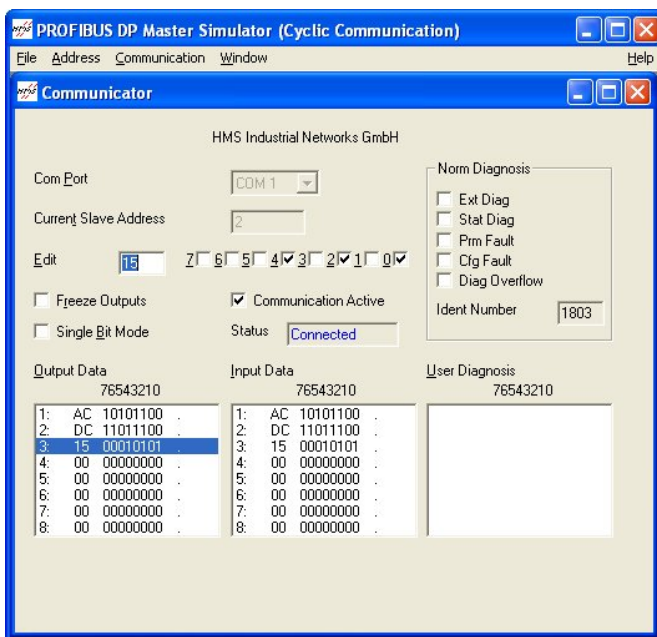


Figure 10. Send/receive Data



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It is also possible to monitor the data in the ABC Config Tool, with the Node monitor function, see picture below.

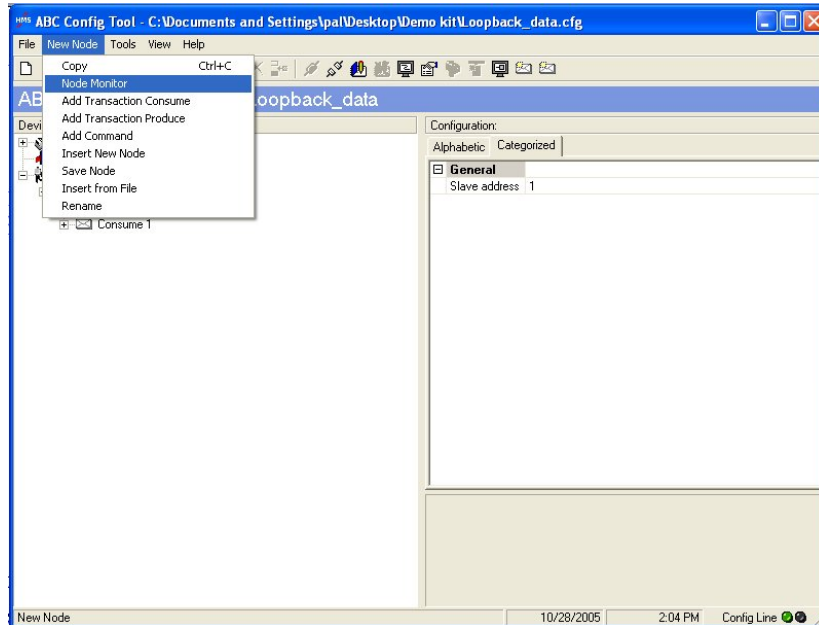


Figure 11. Selecting Node Monitor

When changing the data in the Profibus master simulator software, the changes will show in the Node monitor window, as shown below.

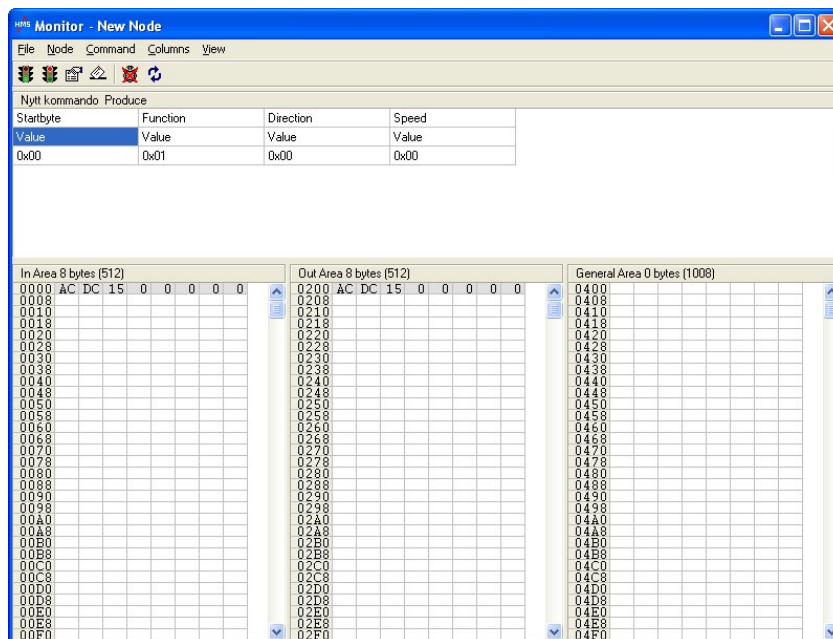


Figure 12. Node monitor in ABC Config Tool



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More information about the network and products

The latest manuals, Softwares and GSD file can be found on the HMS homepage: [www.anybus.com](http://www.anybus.com)

The Profibus user organisation has a homepage on the Internet: [www.profibus.com](http://www.profibus.com)

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