TECHNICAL INFORMATION SHEET - NUMBER 209, Issue 1

TITLE: Using iTools modbus/TCP OPC Server (EuroMBus)
With the Eurotherm Chessell Series 5000





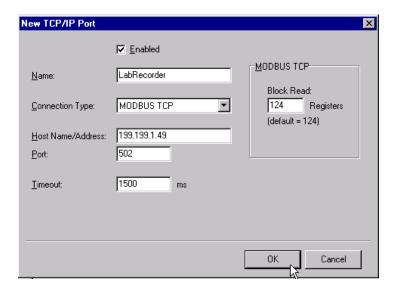
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ISSUED BY: THE APPLICATIONS ENGINEERING DEPARTMENT

Start the iTools OPC Server – EuroMBus – from the Start/Programs/Eurotherm iTools/Advanced menu and select "iTools OPC Server". This is a stand-alone executable program.



From the \underline{E} dit menu selection, select the \underline{i} Tools Control Panel... Click on the TCP/IP tab in the Registry Setup – iTools Port Setup dialog box that appears. Then click on the Add command button to add and configure a TCP/IP to be used for Modbus over Ethernet.

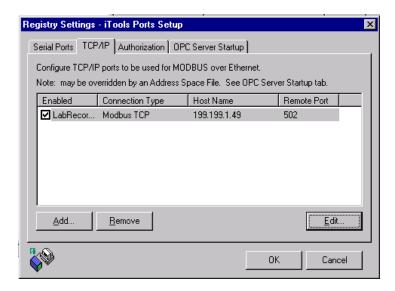


In the \underline{N} ame text field enter a name for the recorder that will be connected to this TCP/IP Port. Here we have used the name "LabRecorder". The \underline{C} onnection Type will be the default, MODBUS TCP. The \underline{H} ost Name/Address is the IP Address set up in the Series 5000 Recorder in the Network/Address configuration. Here we have entered "199.199.1.49". This IP Address is for example only and is unlikely to be the one required for your application. Your network administrator can help in entering the proper IP Address. The \underline{P} ort, \underline{T} imeout and Block Read text fields may be left at their default values.

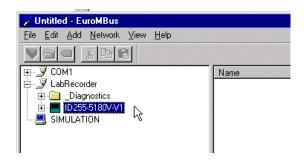




Click on the OK command button to close the dialog box. There is now an entry for a single Series 5100 recorder as shown below. There can be only 1 Series 5000 recorder per IP Address. To add additional recorders, simply click on the \underline{A} dd... command button. To edit existing TCP/IP ports, 1^{st} click on the row to be edited, then click the \underline{E} dit command button. Press the OK command button to close the window.



iTools will need to be restarted for the TCP/IP port to appear as shown below with the name LabRecorder as was done during the configuration of the TCP/IP port.

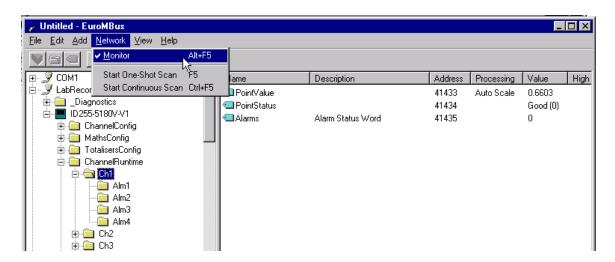


EuroMBus has the capability to automatically detect Series 5000 recorders having modbus/TCP. This applies to all Series 5000 recorders having firmware V1.5 or greater. To enable EuroMBus to detect the recorder, select Network/Start One Shot Scan. As shown in the picture above, a symbol representing a recorder appears under the LabRecorder icon representing the Ethernet port.

As EuroMBus is an OPC Server, it will not communicate to the connected devices unless an OPC client requests data from the OPC Server. It is possible to force EuroMBus to 'monitor' selected parameter folder data by selecting the parameter folder of interest and toggling on the Monitor menu item under Network as shown below.







Under the Value column in the right hand pane are the real-time values from the recorder. Other parameters may be viewed by clicking on any other parameter folder.