

8 – HOW TO SETUP SERIAL PORTS

8.1 Introduction

UNIFLOW-200 can have up to 8 serial ports.

This document describes how to work with different serial port modules.

8.2 Firmware compatibility

The features described for Com1, Com2, Com3 ports are valid for all software versions.

Features described for Com4, Com5, Com6, Com7 and Com8 ports valid for firmware version 220502 or higher.

8.3 Serial ports available

In UNIFLOW-200 serial ports are available as follows.

1 serial port on the CPU board. It is available in each unit, independently of the I/O board configuration. It is denoted as Com1.

2 additional serial ports on the serial extension module. They are available only if you ordered the unit with U200_SE module. They are denoted as Com2 and Com3.

5 additional serial ports on the serial port extension board. They are available only if you ordered the unit with U200_CX5 serial port extension board. They are denoted as Com4, Com5, Com6, Com7 and Com8, independently on that if U200_SE module fitted or not.

Available serial ports are summarized in the table below:

| No U200_SE module No U200_CX5 board | U200_SE module fitted | U200_CX5 board fitted | U200_SE module and U200_CX5 board fitted |
|--|--------------------------|--------------------------|--|
| Com1 | Com1 | Com1 | Com1 |
| | Com2 | | Com2 |
| | Com3 | | Com3 |
| | | Com4 | Com4 |
| | | Com5 | Com5 |
| | | Com6 | Com6 |
| | | Com7 | Com7 |
| | | Com8 | Com8 |

8.4 Installation of the serial port module and board

Manufacturer highly recommend to order UNIFLOW-200 with required number of ports. In this case the serial extension module and/or board will be fitted in the manufacturing process and fully tested.

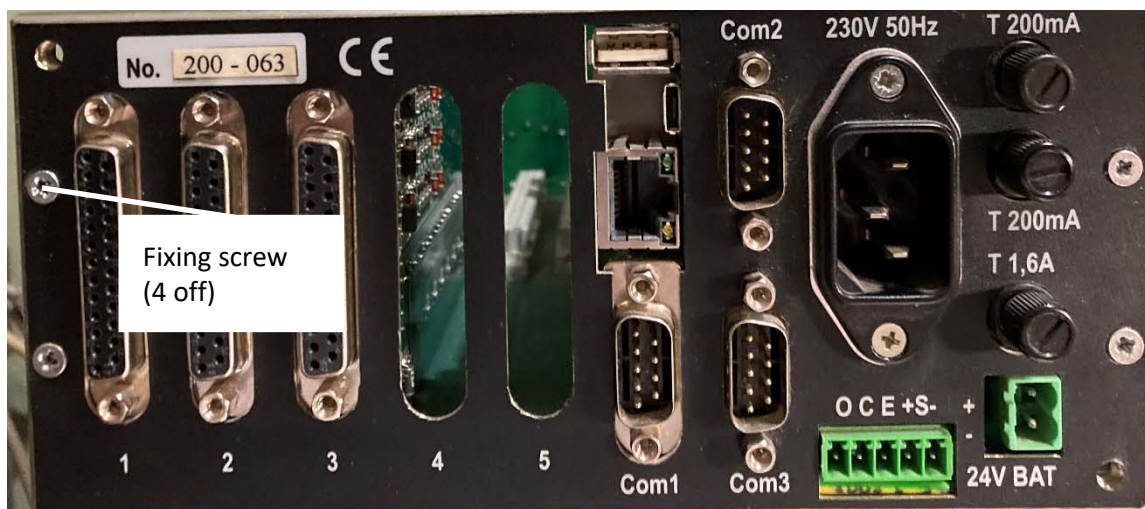
It might happen under certain circumstances the number of ports must be extended later and the unit cannot be returned to the factory. We give some guidance here how to install the serial port extension module/board but it will be done for the Operator own risk and responsibility.

8.4.1 Hardware installation

Remove the internal frame of UNIFLOW-200 unloosing the 2 screws located on the top left (sealing screw) and bottom right (earthing pin) corner of the back pane (see picture below).



Remove the 4 fixing screws fixing the back pane to the rest of the frame (see picture below).



8.4.1.1 Installation of the U200_SE module

Cut out the foil covering the opening for the Com2 and Com3 connectors.

Insert the U200_SE module connectors into the back pane and fix them with the screws provided.

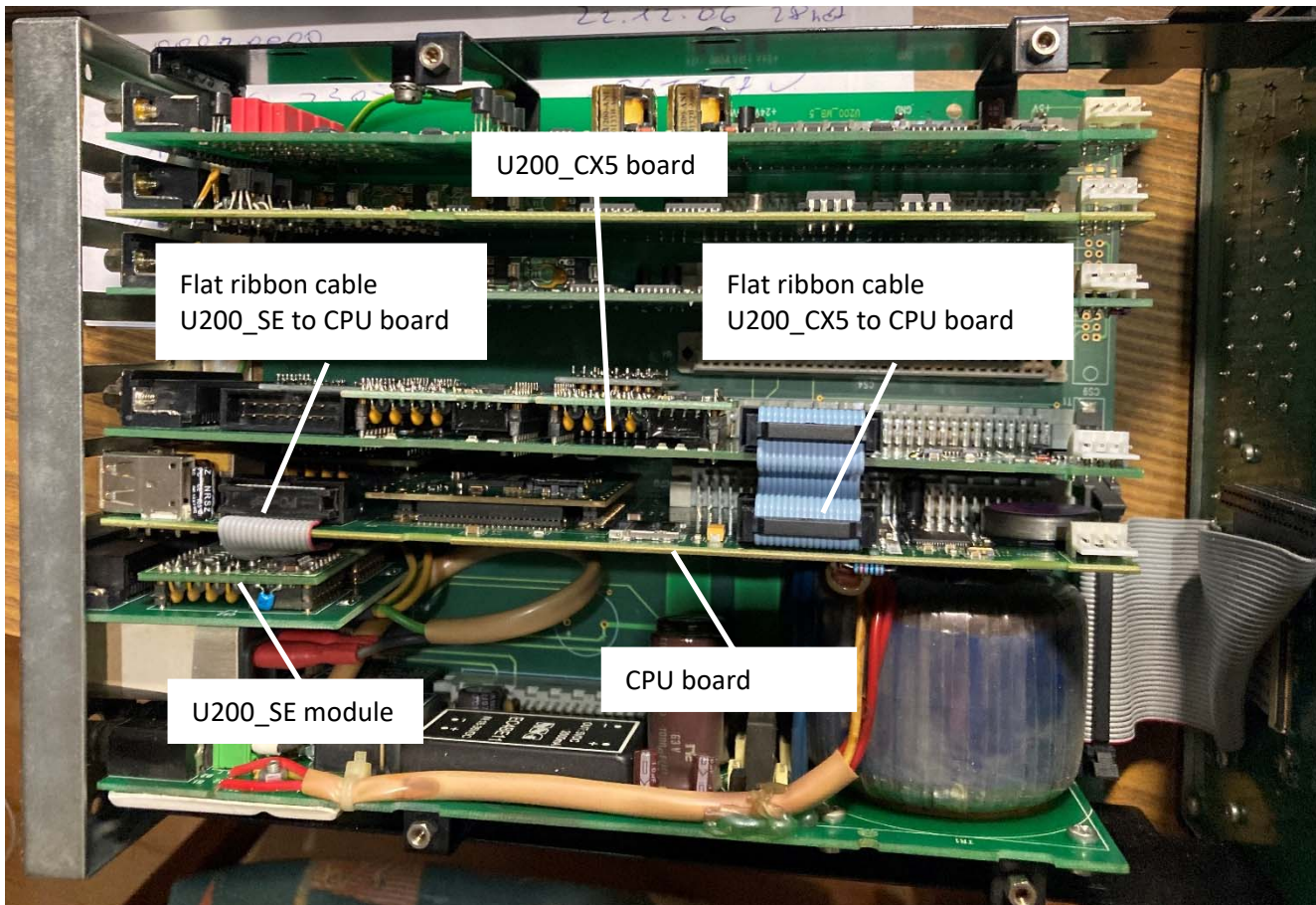
Insert the flat ribbon cable from the module to the socket on the edge of the CPU board located near the U200_SE module (see picture below).

8.4.1.2 Installation of the U200_CX5 board

Cut out the foil covering the opening for the slot 5 connector.

Carefully insert the connector of the board into the socket located on the base plate.

Insert the flat ribbon cable from the board to the socket on the edge of the CPU board located opposite the cable (see picture below).

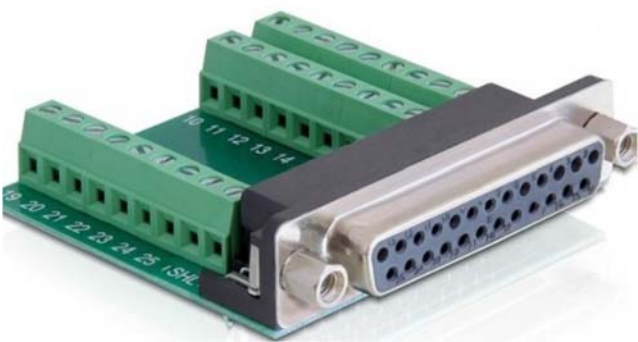


Hardware installation is completed.

Assemble UNIFLOW-200 in reverse order.

8.4.2 Adapter for U200_CX5 board

You can order adapter for U200_CX5 board converting the 25-pins DSUB board connector to screw terminals as shown on the picture below.



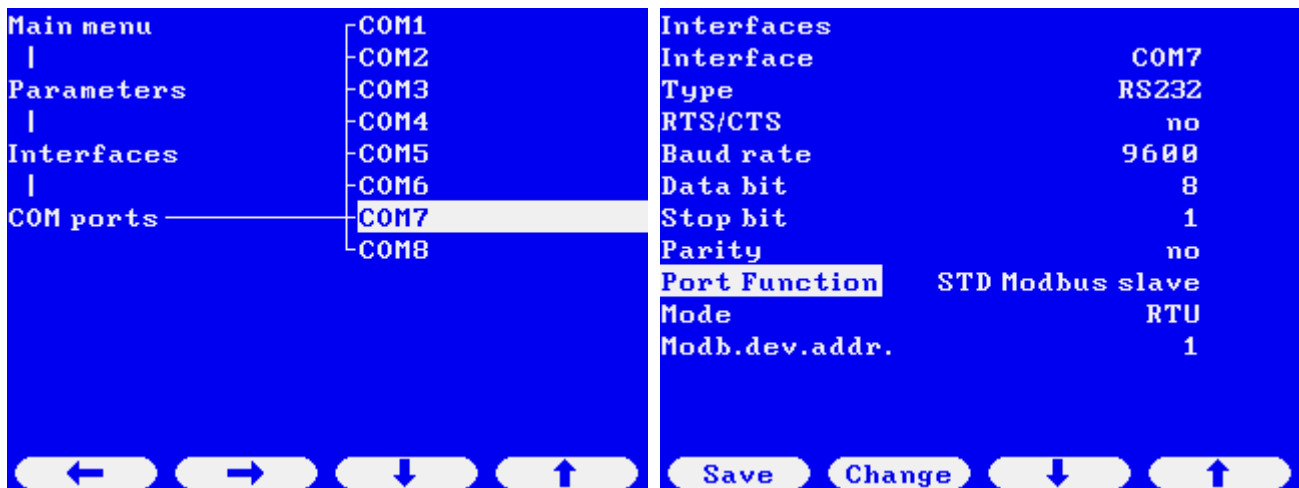
8.4.3 Software configuration

You can configure serial port via display and keypad or you can prepare the parameter project offline by means of the ToolBox software suit.

The setup process for each port is identical.

8.4.3.1 Serial port configuration via display and keypad

Go to the Com ports menu and select the com port you want to setup, as shown on the picture below. Only ports existing in the flow computer will be displayed for selection.

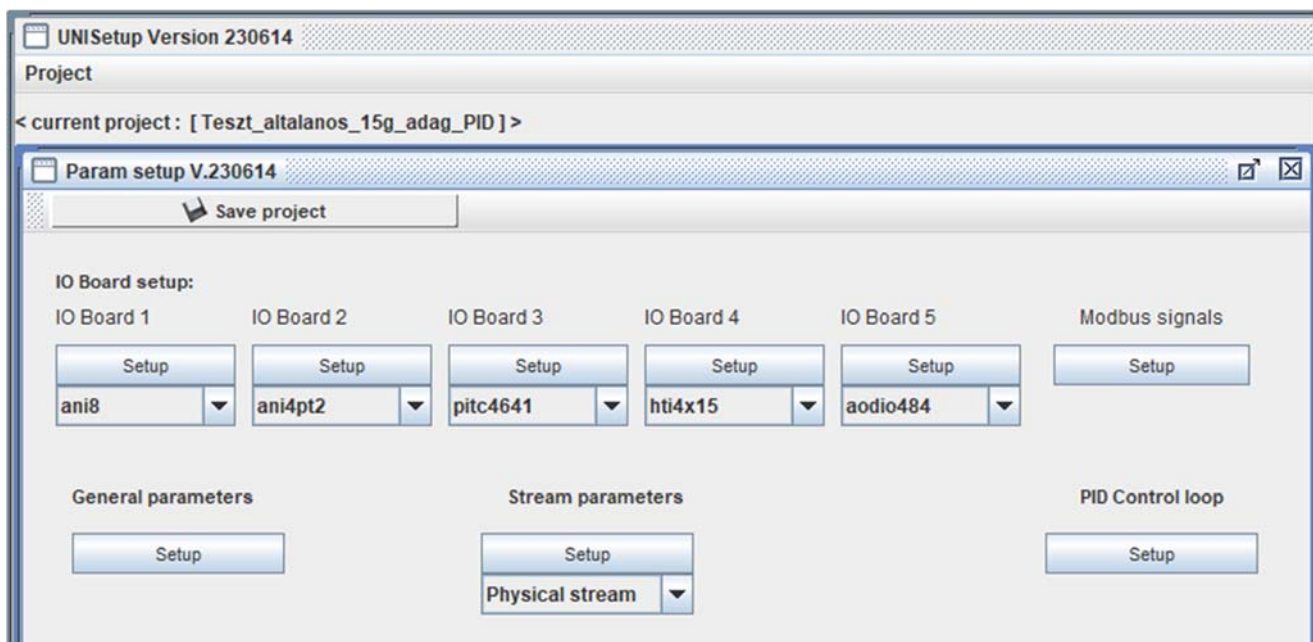


On the com port setup page modify the parameters to match the settings of the device connected to that com port. Depending on the port function selected some other parameters may appear.

See detailed instruction about the serial port setup in the UNIFLOW-200 Instruction Manual, par. 9.2.4.1. Serial ports.

8.4.3.2 Serial port configuration in UNISetup software

Create a new or open an existing project to be modified in the UNISetup.



Click on the General parameter Setup button.

Select the Com tab and select the port to be setup from the dropdown list.

In UNISetup all ports from Com1 to Com8 will be listed. You should take care to configure only those ports which are used in your application.

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UNISetup Version 230614

Project

< current project : [Teszt_altalanos_15g_adag_PID] >

General parameters

Save parameters

Com Ethernet Period settings User def. display User data P

Interface : Com6

Type :

RTS/CTS handshake :

Baud rate :

Data bit :

Stop bit :

Parity : no

Function : STD Modbus slave

Mode : RTU

Modbus dev. addr. : 1

UNISetup Version 230614

Project

< current project : [Teszt_altalanos_15g_adag_PID] >

General parameters

Save parameters

Com Ethernet Period settings User def. display User data Pa

Interface : Com6

Type : RS232

RTS/CTS handshake : no

Baud rate : 9600

Data bit : 8

Stop bit : 1

Parity : no

Function : STD Modbus slave

Mode : RTU

Modbus dev. addr. : 1

Modify the parameters to match the settings of the device connected to that com port. Depending on the port function selected some other parameters may appear.

See detailed instruction about the serial port setup in the UNIFLOW-200 Instruction Manual, par. 9.2.4.1. Serial ports.