

CompactCOM

straton user guide – Rev. 8

sales@straton-plc.com



straton



STRATON AUTOMATION, All Rights Reserved

The information contained in this document is the property of STRATON AUTOMATION. The distribution and/or reproduction of all or part of this document in any form whatsoever is authorized only with the written authorization of STRATON AUTOMATION. The technical data are used only for the description of the product and do not constitute a guarantee of quality in the legal sense of the term. We reserve the right to make technical changes.

Content

1. INSTALL EDITOR AND RUNTIME.....	4
2. DRIVER CONFIGURATION	4
2.1. Insert and configure Master/Port	4
2.2. Insert and configure Slave and Variables	7
3. MODULE INFORMATION.....	8
4. STATE MACHINE INFORMATION	8
5. DOWNLOAD THE APPLICATION	9
6. FREQUENTLY ASKED QUESTIONS	9

1. Install Editor and Runtime

Download and install from <https://straton-plc.com/telechargements/>

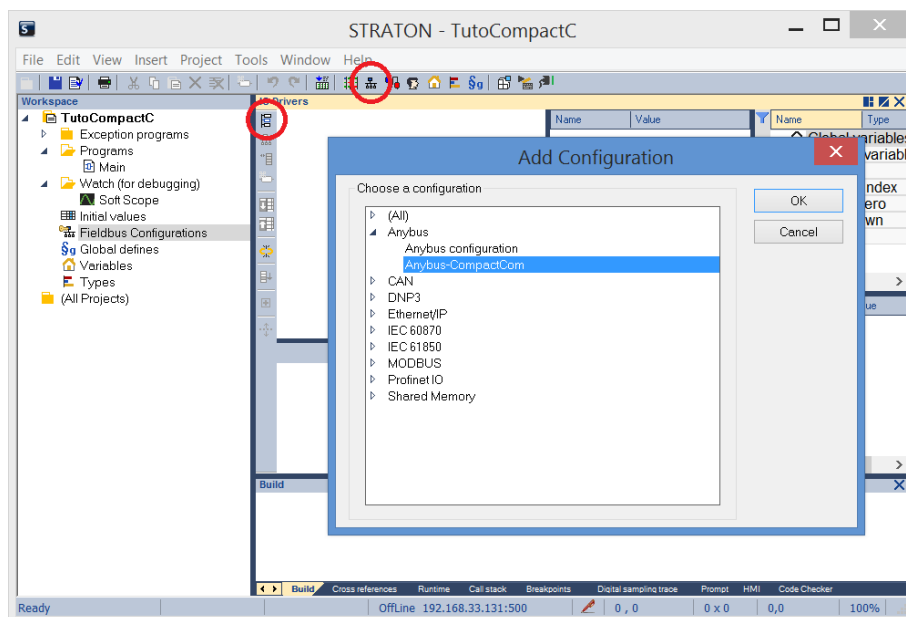
Additional files are required for version older than 8.3:


- ▶ K5BusAnyCompactCom.dll to copy in the IDE folder, subfolder IOD
- ▶ T5BusCompactCom.dll to copy in the runtime folder

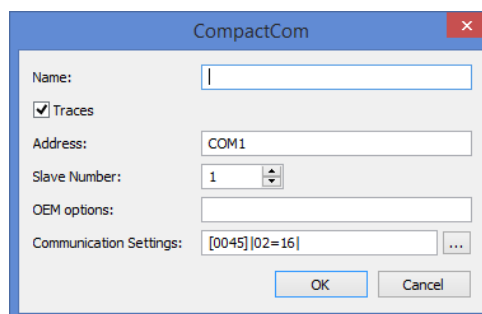
2. Driver configuration

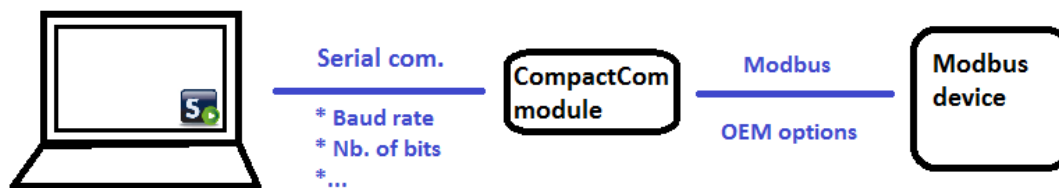
2.1. Insert and configure Master/Port

Open the IO Drivers (), insert a new configuration () and select the Anybus-CompactCom driver.



The Master/Port, corresponding to your Serial Port, is automatically created (if not click on the icon ). For best understanding of the different parameters the figure shows an example of configuration for a **Modbus RTU** configuration.



**ADDRESS:**

For example with a Windows runtime, using a serial communication on port COM1, user has to put the following parameter: COM1 (by default the baud rate is 112500 Baud, without parity bit and composed of 8 bits with 1 stop-bit: these settings cannot be changed by user).

SLAVE NUMBER:

It represents the first instance of the *network configuration object* (see documentations on the Anybus website) and it depends on the protocol.

In our example, the first instance corresponds to the Modbus node address (1 to 247)

OEM OPTIONS:

This field is kept for compatibility with previous drivers. Now, let this field empty and click on the button near the "Communication Settings" edit (refer to section "Communication Settings").

It corresponds to the second instance of the *network configuration object*, in our example it's the communication settings, here for a communication speed of 19200 Bauds, no parity bit, one stop-bit, one has to set this parameter to 19.

b7	b6	b5	b4	b3	b2	b1	b0	Contents
						0	0	Even parity, 1 stop bit (default)
						0	1	Odd parity, 1 stop bit
						1	0	No parity, 2 stop bits
						1	1	No parity, 1 stop bit ←
								1200bps
								2400bps
								4800bps
								9600bps
								19200bps (default) ←
								38400bps
								57600bps
								76800bps
								115200bps

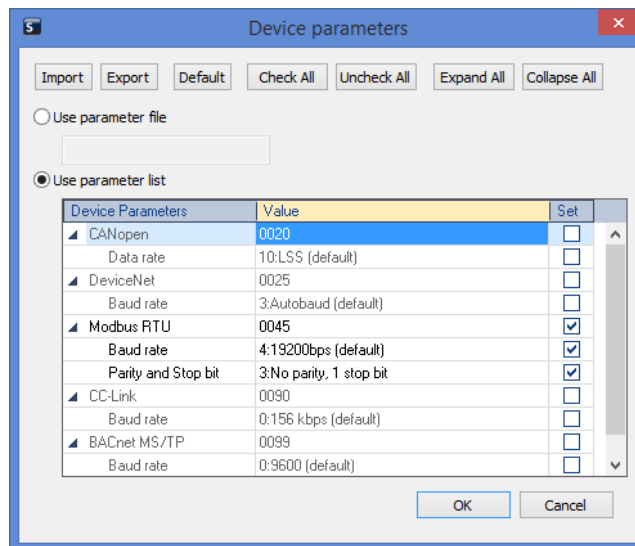
NB: For the use of other protocols refer to the *Network Configuration Object* description in the corresponding *Fieldbus Version* documentations, available on:

<https://www.anybus.com/home>

Remember that 'Slave number' corresponds to Instance#1 and OEM option corresponds to Instance#2 of the *Network Configuration Object*.

COMMUNICATION SETTINGS:

When user clicks on the button next to "Communication Settings" (...), the dialog below is displayed:



Ex: when the user wants to set Modbus RTU Instance#2 settings, he has to check Modbus RTU and has to double click on value "Baud Rate" and value "Parity" to change settings.

Note that many settings can be set, for example: Modbus + DeviceNet.


Depending to the device used, the configuration will use correct settings for instance#2 value.

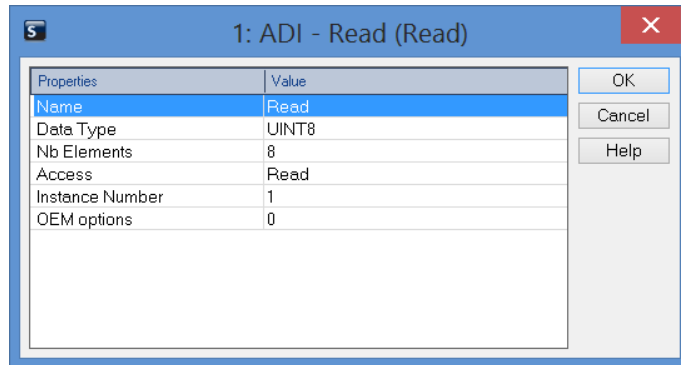
In this dialog user can also export and import settings.

Use "Default" button to default all values.

NB: these settings correspond to the Instance#2 of the *Network Configuration Object* for each type of module.

2.2. Insert and configure Slave and Variables

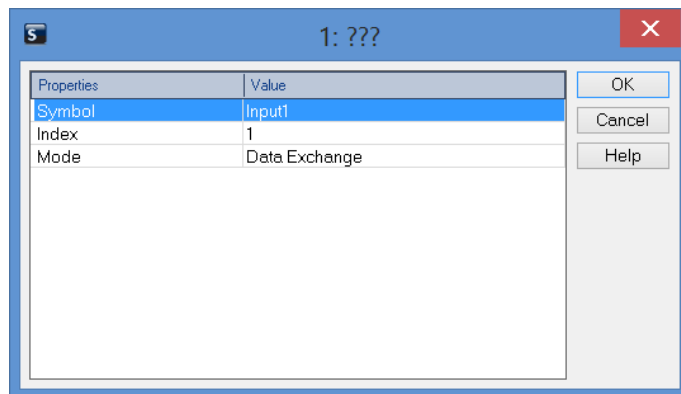
The Slave/Datablock is automatically created (if not click on the icon ) , enter the corresponding information for the ADI.



Properties	Value
Name	Read
Data Type	UINT8
Nb Elements	8
Access	Read
Instance Number	1
OEM options	0

Buttons: OK, Cancel, Help

Insert a Variable () and enter the corresponding information:



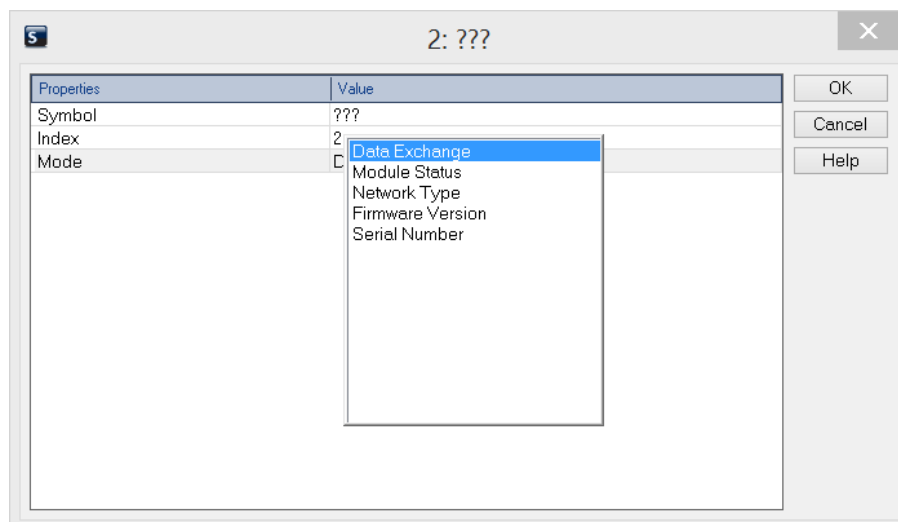
Properties	Value
Symbol	Input1
Index	1
Mode	Data Exchange

Buttons: OK, Cancel, Help

When you map a variable to a data block in a master configuration, you can select it to be:

An exchange of data (exchange between the driver and the straton variables).

A status (diagnostic information provided to the application)



Properties	Value
Symbol	???
Index	2
Mode	<div> Data Exchange Module Status Network Type Firmware Version Serial Number </div>

Buttons: OK, Cancel, Help

3. Module information

A variable can be map to the module status information, the type is Integer (DINT).

Value	Information	Meaning
0	SETUP	Setup in progress
1	INIT	Mapping is ready
2	WAIT_PROCESS	Wait for master connection
3	IDLE	
4	PROCESS_ACTIVE	Connection ready
5	ERROR	
7	EXCEPTION	
128	COMMUNICATION_LOST	Serial communication to CompactCom error.

4. State Machine information

A variable can be map to the state machine information; the type is Integer (DWORD).

Value	Information	Meaning
0	RESET	Reset
1	SETUP	Setup
2	CONFIGURATION	Set configuration
3	RUN_NO_PD	Run with no process data
4	RUN	Run
5	SHUTDOWN	Shutdown

5. Download the application

Download the application to the runtime:

- ▶ Select the communication parameters in menu Tools/Communication Parameters
- ▶ Establish the connection through menu Project/Online

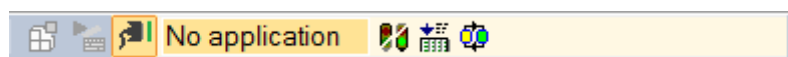
RESULT IS:



The download is successful and application starts correctly.



The runtime is not started or communication parameters are wrong.



The application is not yet downloaded or an error occurs during startup. More detail can be found in the output view.

The application is not yet downloaded or an error occurs during startup. More detail can be found in the output view.

6. Frequently Asked Questions

CompactCom-Anybus with Modbus RTU protocol doesn't work.

The Modbus RTU configuration is only available from version:

- ▶ straton 8.7