

Required hw:

- **CBX 800**



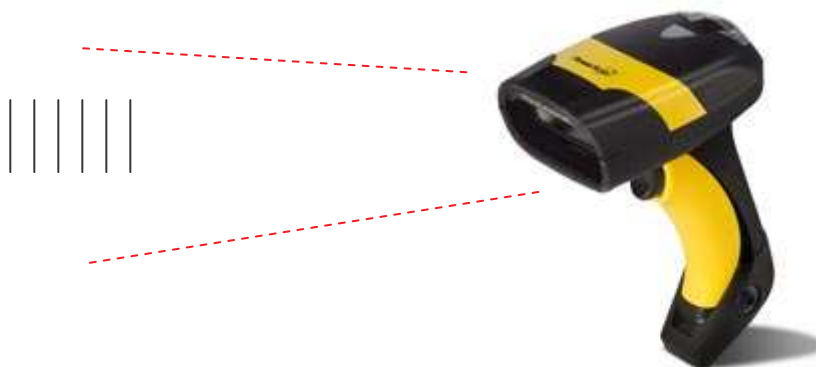
- **BM3x0 Profibus interface board**



- **Hand held device**
(+ CAB 509/512)



1. Configure the HHR device as RS232 device



Bar codes below refer the following hand-held devices:
Heron D130, Gryphon D130, Dragon D131, Powerscan D8330

RESTORE DEFAULT



\$+\$*

RS232-STD (9600-8-N-1,CRLF)



\$+CP0\$-

Bar codes below refer the following hand-held device:
PD8530

RESTORE DEFAULT



RS232-STD (115200-8-N-1,CRLF)



2. Set the HHR baud rate in the following range: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200bps



Bar codes below refer the following hand-held devices:
Heron D130, Gryphon D130, Dragon D131, Powerscan D8330



Bar codes below refer the following hand-held device: PD8530

BAUD RATE

1200 baud



2400 baud



4800 baud



9600 baud



14400 baud



19200 baud



38400 baud



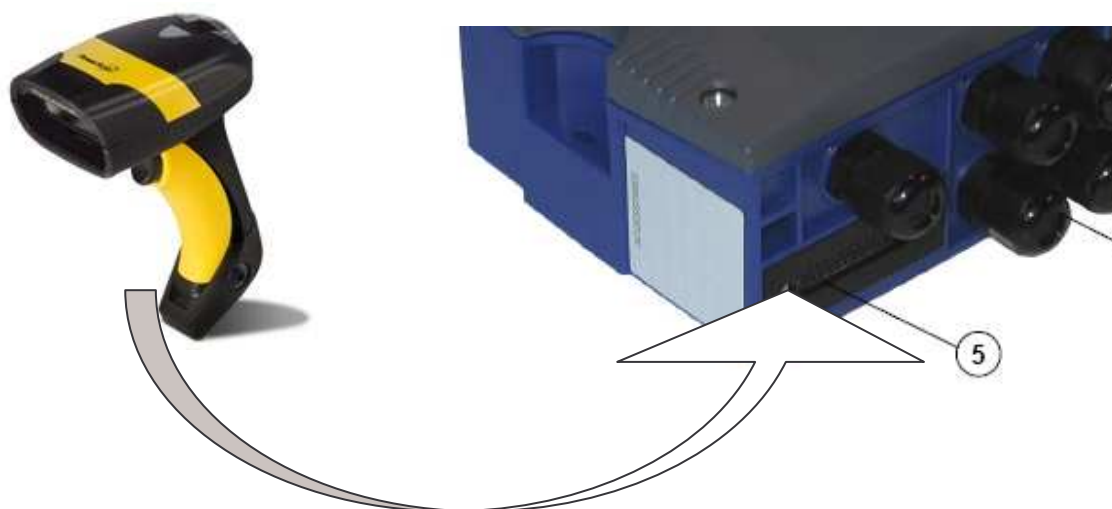
57600 baud



115200 baud



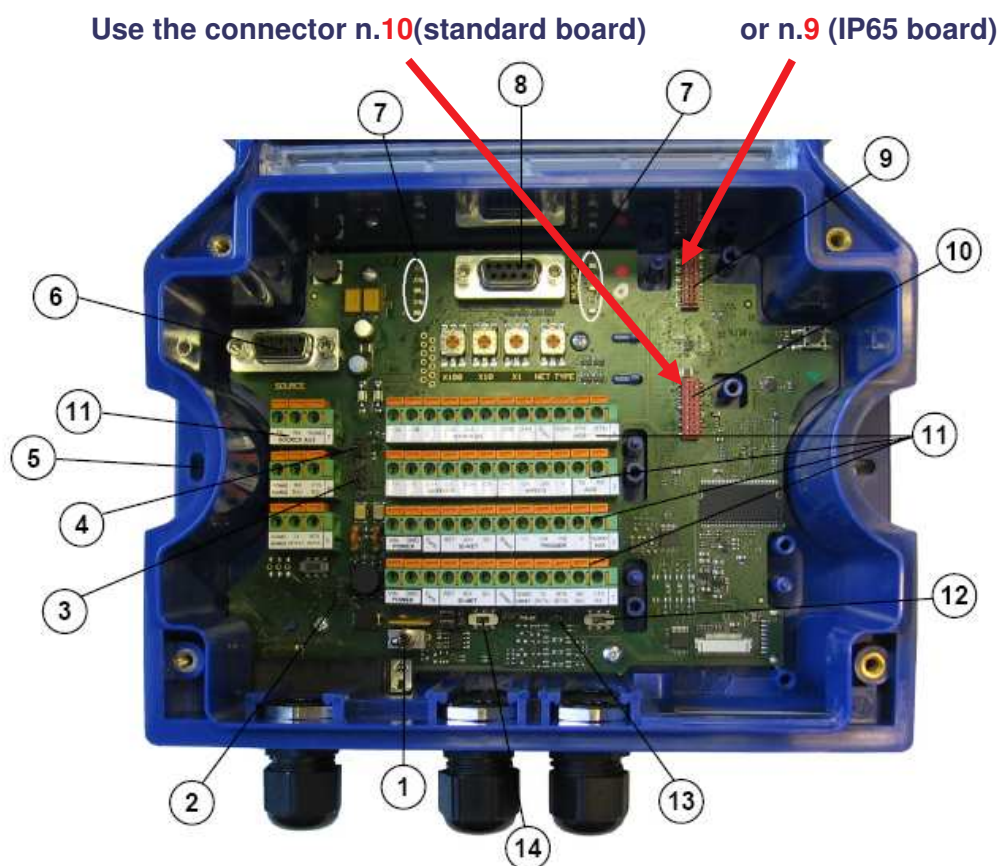
3. Connect the HHR to the 25 pin connector (n.5) of the CBX through the cable CAB 509/512



4. Plug the BM3x0 Profibus interface board into the box¹

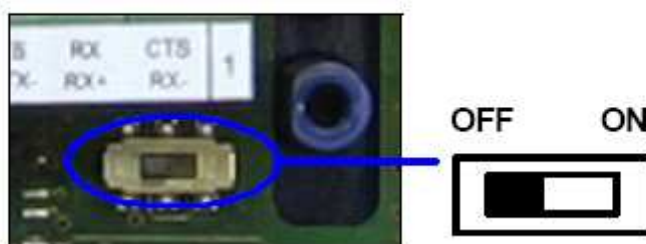


¹ Refer to the [Datalogic Host Interfaces Modules - Instruction Manual](#) for further information

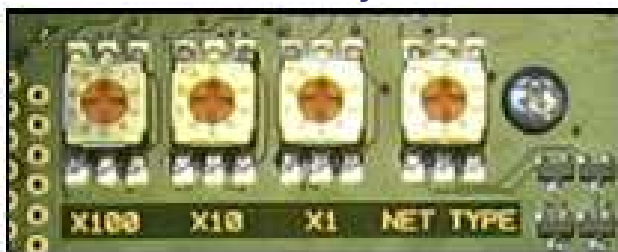


5. Move the RS485 termination switch to the OFF position

RS485 HD



6. Set the CBX rotary switches

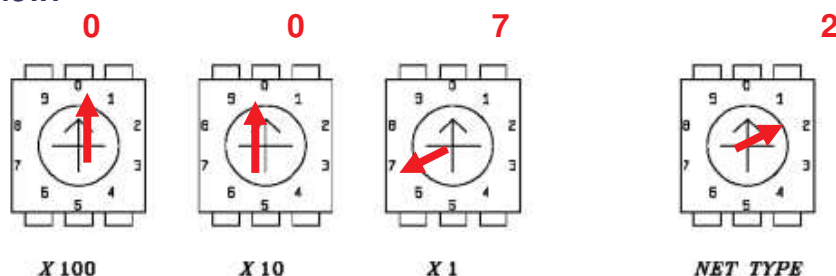


on these positions:

- Net Type = 2
- Address X100 = 0,1
- Address X 10 = 0..9
- Address X 1 = 0..9

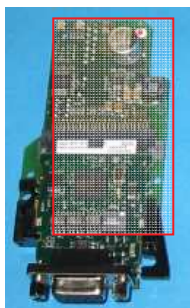
Note: the address range is 000...126²

Example: to set the Profibus address "7", move the rotary switches like in the figure below:



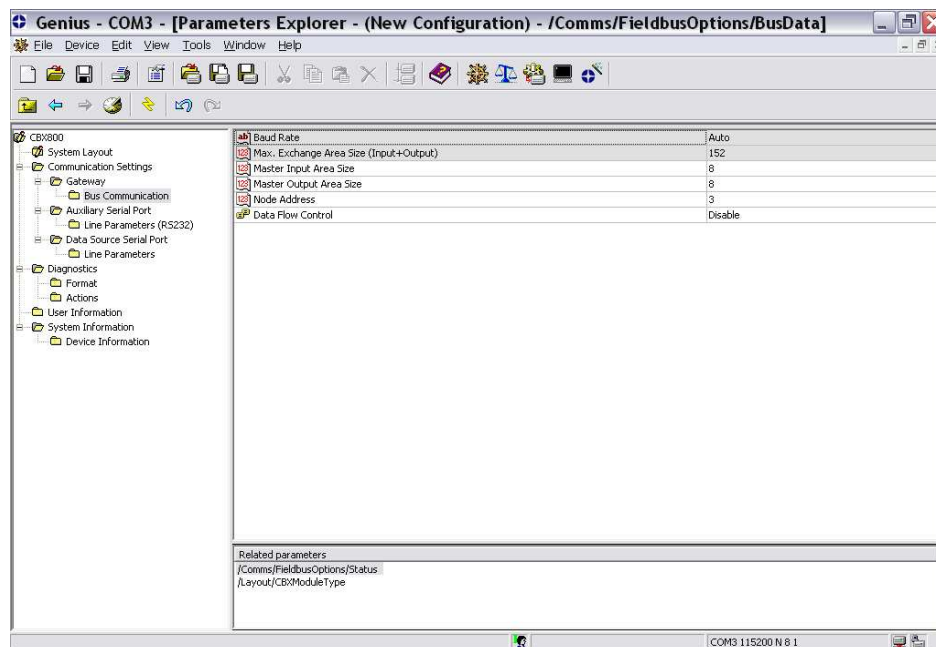
7. Switch ON the CBX 800

Then, in approximately 10 seconds the GREEN Status LEDs (the couple n.2 on the picture) will turn ON



² 126 is a special address which allows the Fieldbus Master, through software, to set the node address in the range from 000 to 125.
Refer to the [Datalogic BM100 Instruction Manual](#) for further information.

8. Launch the “Genius” sw tool and open the CBX800 configuration



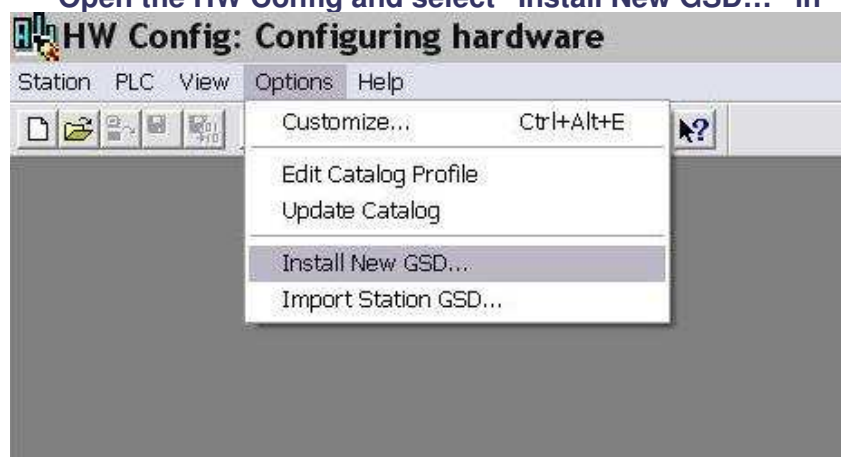
9. Set the CBX 800 parameters as in table below

CBX800 Parameters	Value	Note
Topology role	Other	
System Layout / Host Port Type	Profibus	
Communication Settings / Gateway / Status	<checked>	
Communication Settings / Gateway / Bus Communication / Node Address	000..126	<i>The showed value must be aligned to the address rotary switches positions</i>
Communication Settings / Gateway / Bus Communication / Data Flow Control	Disable	<i>Suggested value to check the bus communication</i>
Communication Settings / Data Source Serial Port / Data Destination: Gateway	<checked>	
Communication Settings/Data Source Serial Port/ Send Data on	Termination String	
Communication Settings / Data Source Serial Port / Expected Termination String	Aligned to the HHR device configuration	<i>For example, if the HHR device data terminator is the character <CR>, the same character has to be set for the box</i>
Communication Settings / Data Source Serial Port / Line Parameters/ (all parameters)	Aligned to the HHR device configuration	<i>For example, if the HHR device baud rate is 9600, the same value has to be set for the box</i>

Note: keep the default values on all the other parameters

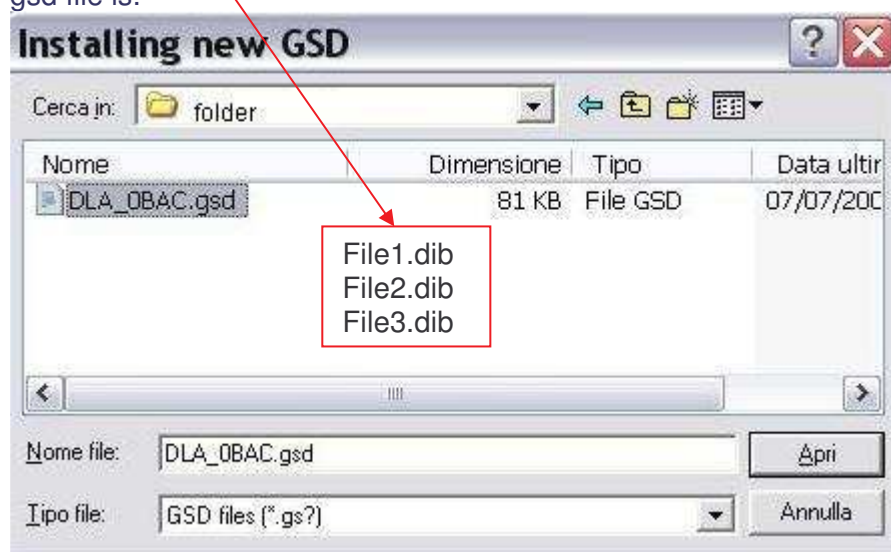
10. Profibus Master³ configuration

- Open the HW Config and select “Install New GSD...” in “Options” tab



- Find the “DLA_OBAC.gsd” file

If **bitmap (.dib) files** are available, they must be placed in the same local directory where the gsd file is.



³ As Profibus Master sample, we refer a **S7-300 Siemens PLC**

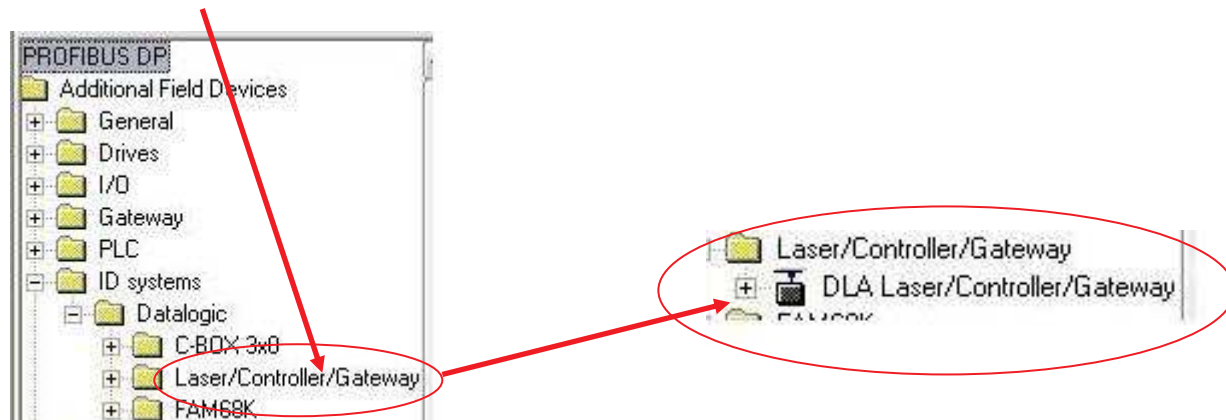
- Update the catalogue



- Find the new node

A new **DLA Laser/Controller/Gateway**⁴ device will appear in the PLC catalogue under the folder:

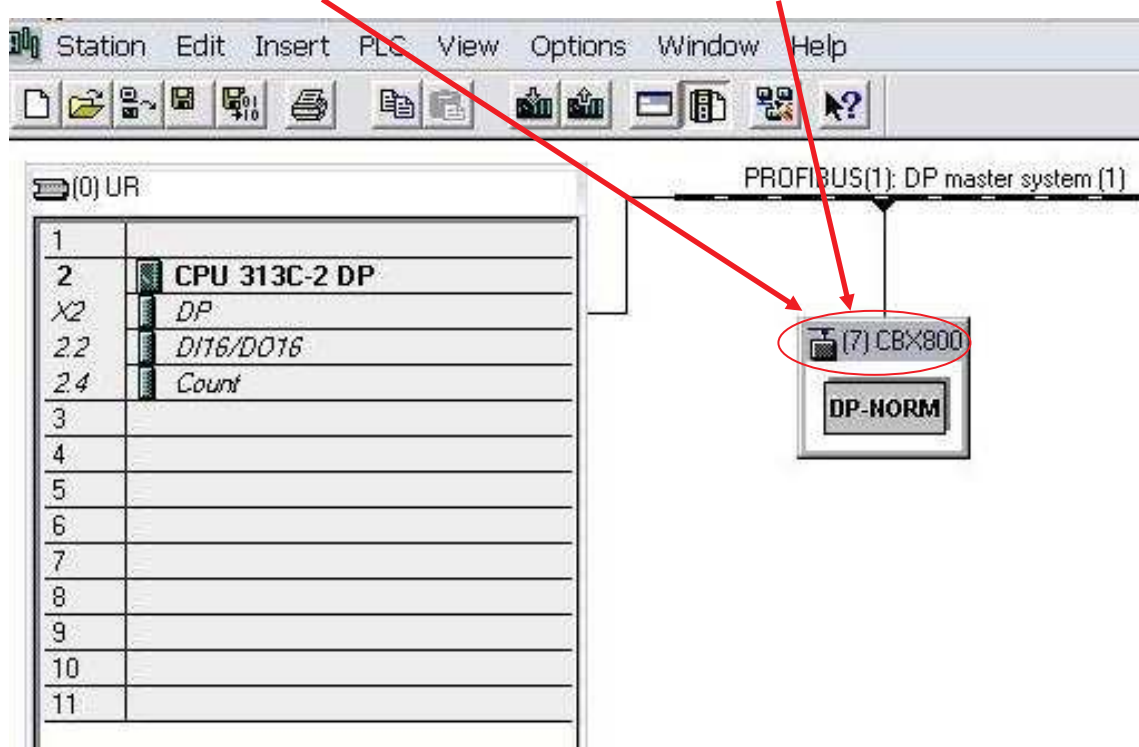
Profibus-DP - Additional Field Devices - ID Systems - Datalogic – Laser/Controller/Gateway



⁴ Folder name and device name refer the gsd file "DLA_0BAC" revision 3.1

- Insert the device into the PROFIBUS network

The easy drag&drop function allows inserting the new device in your own network. In the picture it is the **node n.7** and it has been named as “**CBX800**”

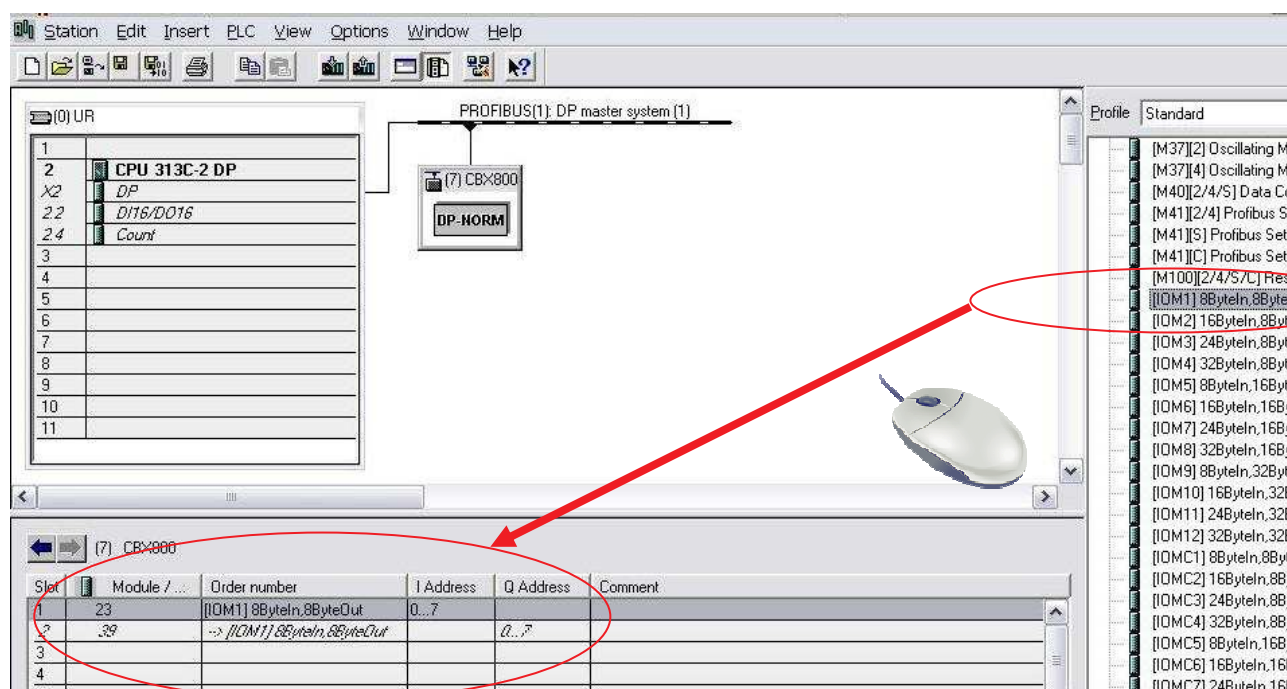


- Set the I/O areas for the node

Use the drag&drop function to take a module from the list on the right side and move it into the table under the network diagram. Do it in order to set the I/O areas for the node.

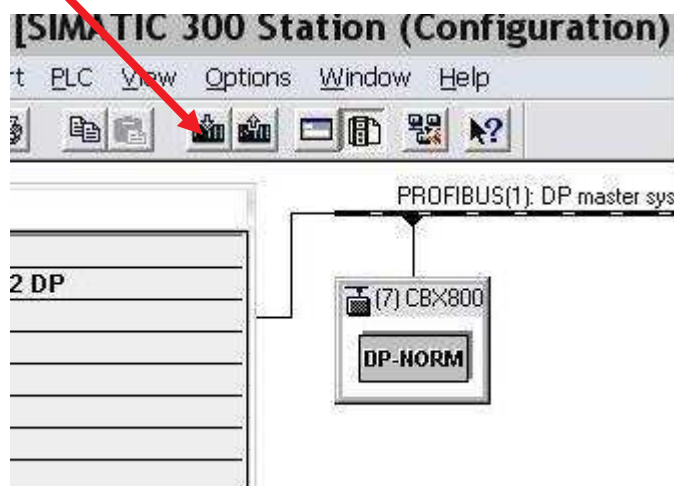
Warning: 8 INPUT bytes and 8 OUTPUT bytes required, at least

For example, take the "[IOM1]" module to set 8 input bytes and 8 output bytes



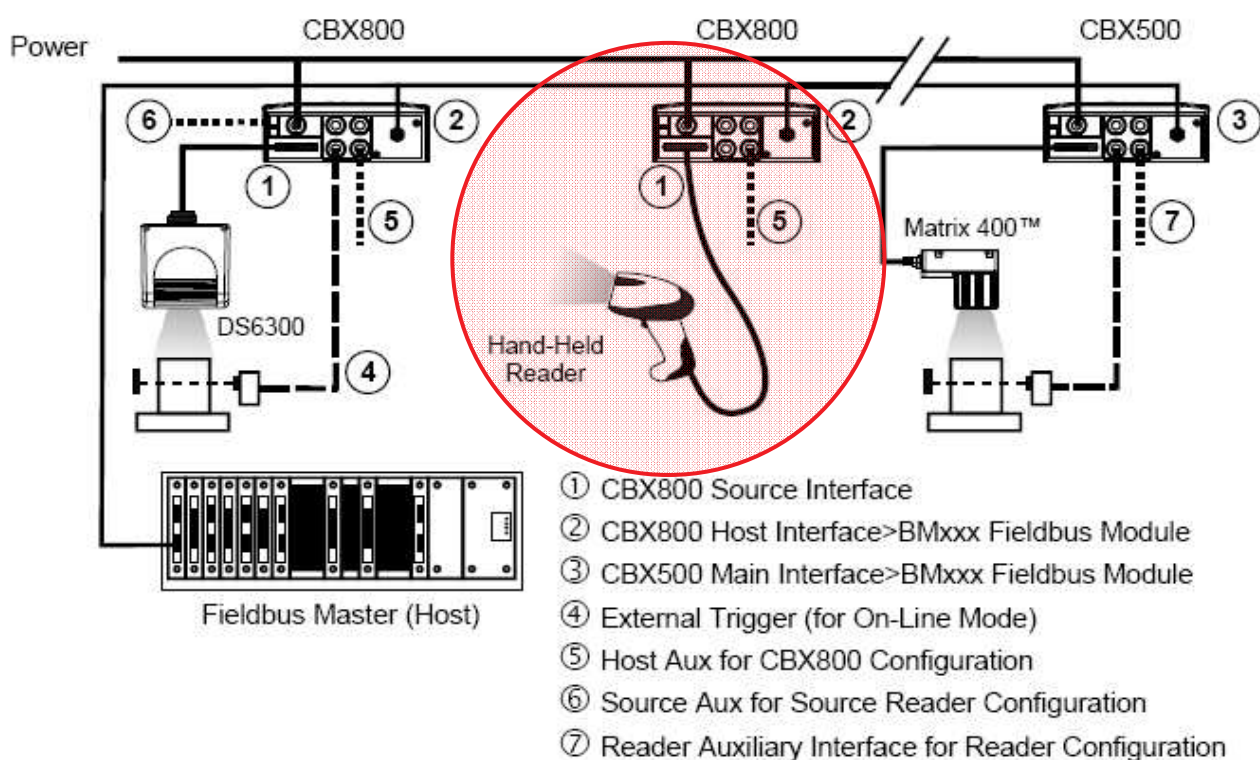
- Your HHR device is now properly configured to start to work as Profibus node

Press the *Download* icon to transfer sw & hw configuration to your PLC.



Now you are ready to work and see data coming from the HHR device to the PLC: just a data is available, or through a data handshake control⁵, the data can flow to the PLC over the bus.

Referring the “fieldbus gateway” layout (pag. 28 of current manual) below, the previous steps makes running the red circled area:



Fieldbus Gateway

⁵ Refer to the “DAD-DPD Driver” manual for information how to implement the Datalogic data flow control