Firmware update instructions CMi5110 RS232/USB

1. Unzip file on local hard drive

You should now have the following files unzipped in folder:

- collprog.exe
  Which is the executable
- collprog.bat
  Click to start the executable with correct parameters
- Cmi5110_X.X.X.txt
  The firmware for Cmi5110
- Readme.txt
  A short explanation of the files, and what's in them

(See chapter 5 for upgrading over TCP/IP, CMe3000).

2. Make sure you have connected your PC to the Mbus (on the CMi5110)

If a CMi2110 is connected to the Mbus, this must be detached first.

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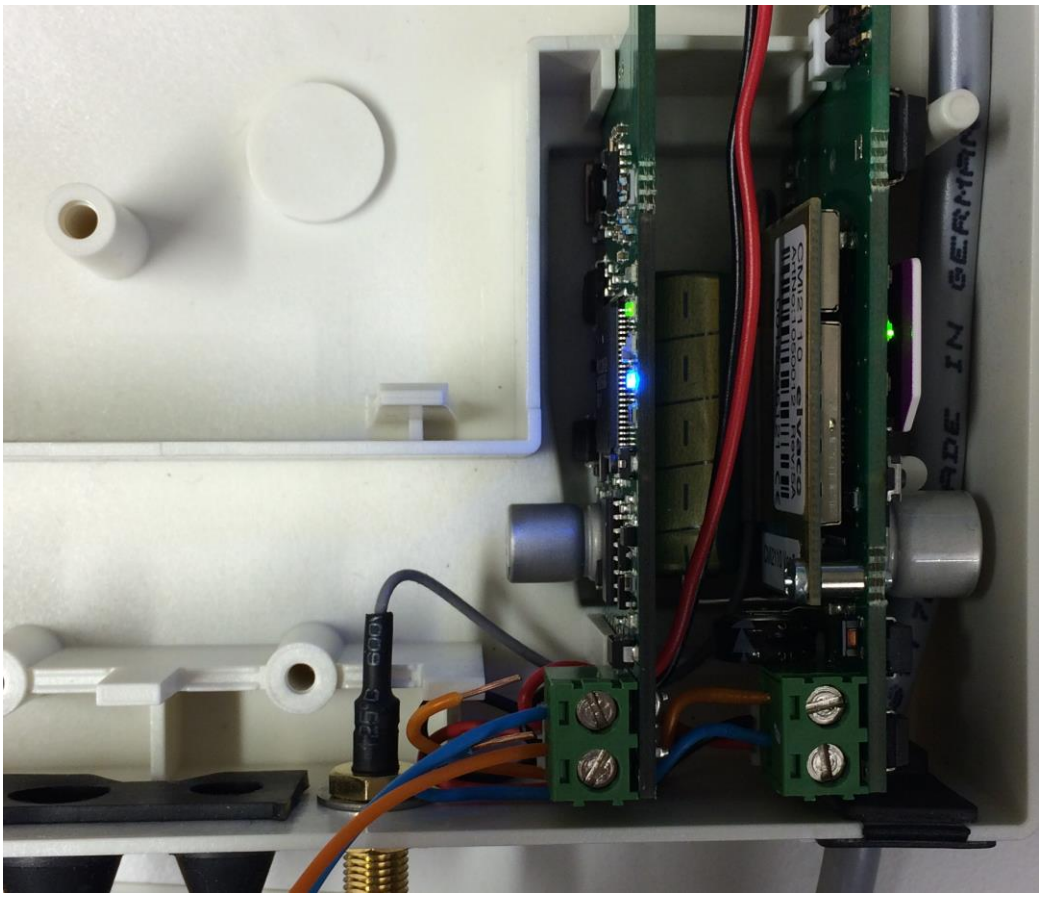


3. Right click on the collprog.bat and choose edit

Here you need to fill in the correct serialnumber(s)

Target must be formatted accordingly to the following format:
[collprog executable] [comport] [firmware] [serialnumber] [key] [baudrate]

Example:
"collprog.exe" 1 cmi5110_1.6.5.txt 62000060 2400

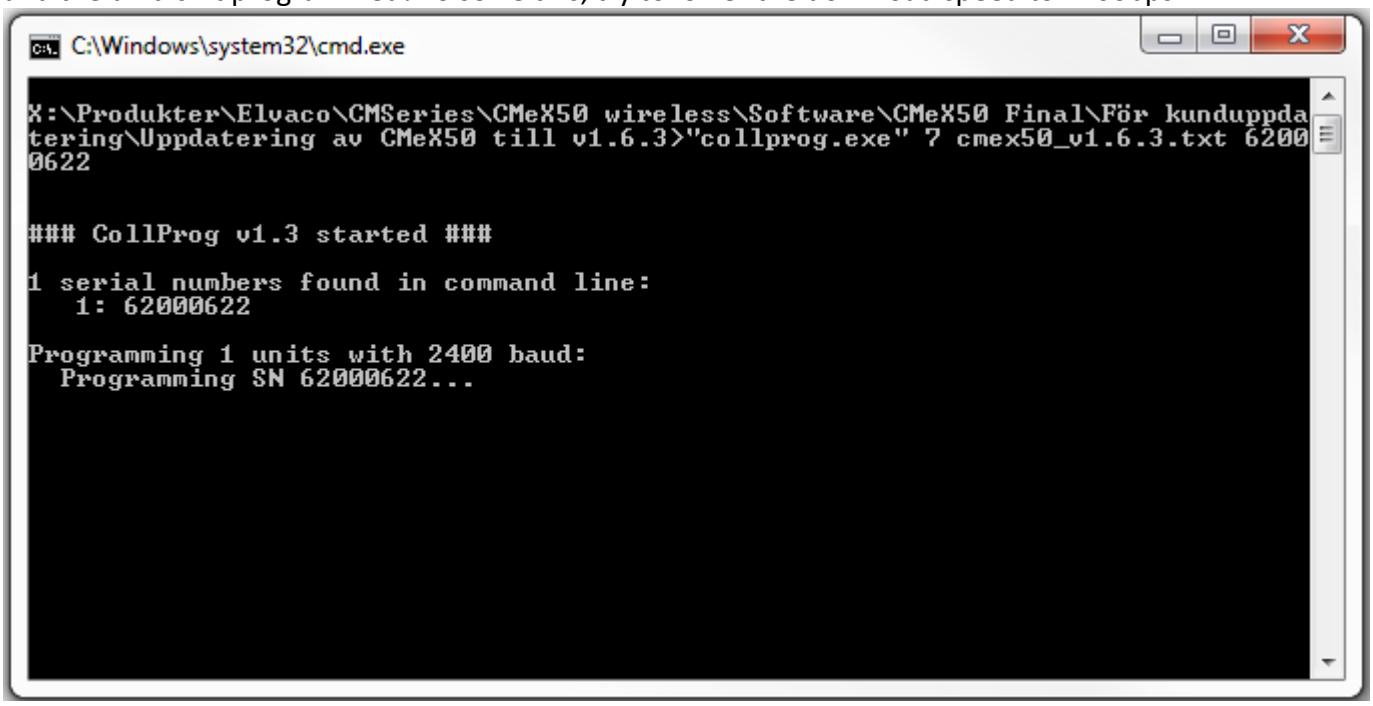
[collprog executable]	- the name to the exe-file (must be in the same folder).
[comport]	- which com-port to use, (you can find this in the Device Manager, under Ports COM and LPT, and here you should look for "Silicon Labs CP210x USB to UART Bridge").
[firmware]	- is the name of the programming file (the actual code for the microprocessor).
[serialnumber]	- is the serialnumber for the units to be programmed (if there are several units to be programmed, then thus serialnumbers are separated with a comma, like 62000001,62000002,62000003).
[baudrate]	- is the download speed. By default (if this is empty) is 2400bps.

Port number

You will find the port number in the Device Manager under "Ports (COM and LPT)", and here you should look for "Silicon Labs CP210x USB to UART Bridge".

4. Double click on the collprog.bat to start executing the update

An console window will pop up and update progress information will be printed.
NOTE! If the windows just turns on for a very short time (around 1 second), then something has failed and the unit isn't programmed! To solve this, try to lower the download speed to 2400bps.



The update will take about approximately 3-5 minutes per unit (but will vary with different depending on what bps that is choosen). If any error messages are printed please try again. If you still are having problems please contact Elvaco AB for support. When the update are ready the window will disappear.

The update will be faster if baud rate 9600 is used. Some serial ports may not work on this baud rate though. USB->RS232 converters may also cause problems, avoid these.

5. Upgrade over TCP/IP (with CMe3000)

You must know the IP for the CMe3000.

Download and use a SerialPortRedirector (http://www.fabulatech.com/serial-port-redirector-download.html). This is a freeware as long as you only connect/use one serialport.

Open SerialPortRedirect and add a new virtual port. DoubleClick on the COM-port and under General tab, enter the IP address for the CMe3000, and set TCP-port to 10001. Under the Protocol tab you must change to Raw data, and uncheck CTS & DSR & DCD & RING, (see picture below).

Now you can go back to chapter 3 (above) and start edit the bat-file. The COM-port there is the same as you use in SerialPortRedirect.

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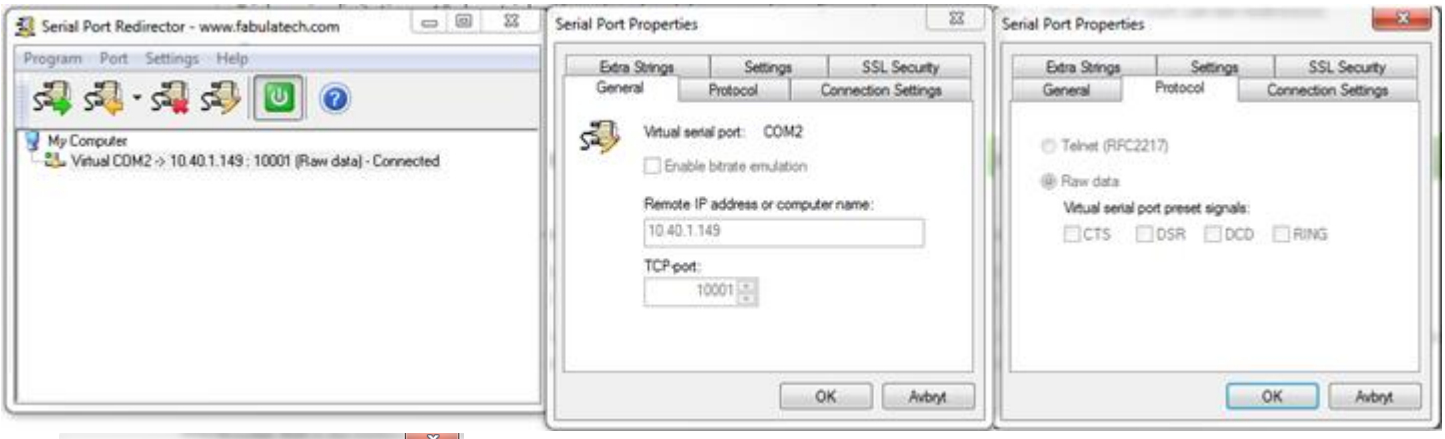

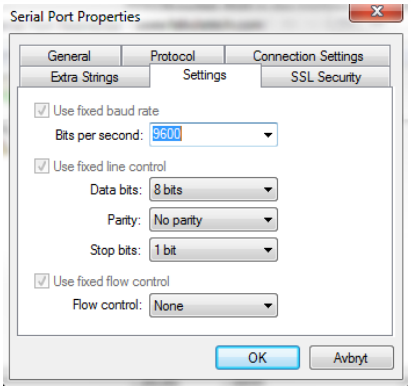

6. Upgrade over GSM/GPRS (with CMi21x0/CMe2100)

The simcard in the GSM/GPRS module must have static IP

To be able to connect and update the firmware of CMi5110 you first need to activate tmbus in the module.

A) Send **qset tmbus2 on** via sms

B) If you now send **status net** to the GSM/GPRS module you will get an answer with the IP address for the simcard, see picture below

```
From:CMi2110{0012044331}
Operator:TELIA S
Cell:B2CB
Signal:-71 dBm
Gprs:Attached
Ip:10.70.1.204
OK
```

C) Send **set common.tcp.tmbus2.packing.mode=transparent** (*must be changed back to **mbus** after the update!)*

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D) Download and use a SerialPortRedirector (http://www.fabulatech.com/serial-port-redirector-download.html). This is a freeware as long as you only connect/use one serialport.

Open SerialPortRedirect and add a new virtual port. DoubleClick on the COM-port and under **General tab**, enter the IP address for the CMe2100/CMi21x0, and set TCP-port to 2400 (Enable bitrate emulation must be unchecked).
In the **Protocol tab** you must change to Raw data, and uncheck CTS & DSR & DCD & RING, (see picture below).
In the **Settings tab** you must set 8bits, No parity, 1stop bit, None flow control.

Now you can go back to chapter 3 (above) and start edit the bat-file. The COM-port there is the same as you use in SerialPortRedirect.