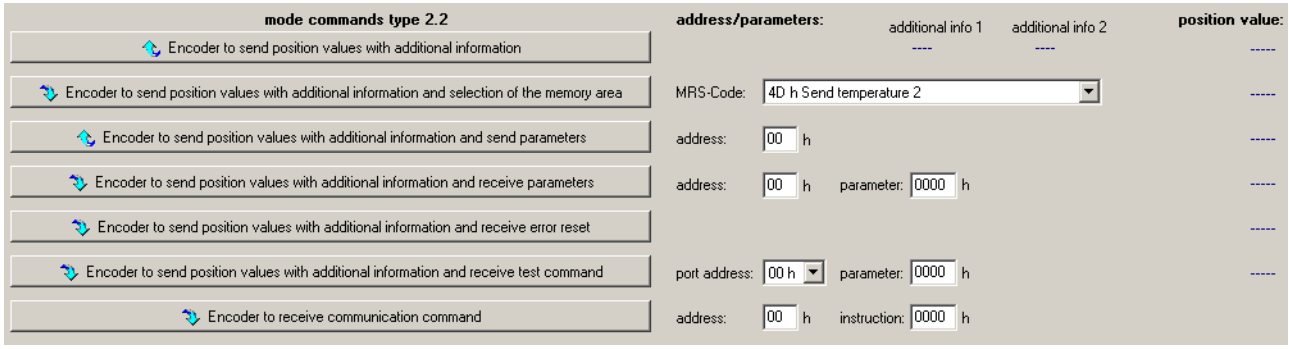
Reading the temperature value

Selection of the additional information 1 "Temperature sensor 2"

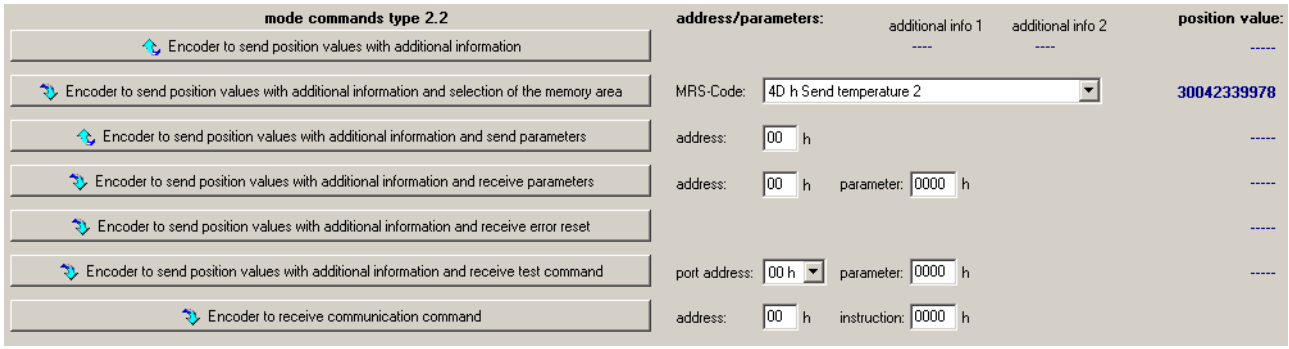
The corresponding flow chart is shown in the appendix of the EnDat specifications.

Selection of the memory area of the temperature value

First the MRS code for the temperature sensor 2 must be sent to the encoder: "Encoder to send position values with additional information and selection of memory area" with the associated MRS code "$4D_h$".



The returned position information is shown on the right edge of the screen.

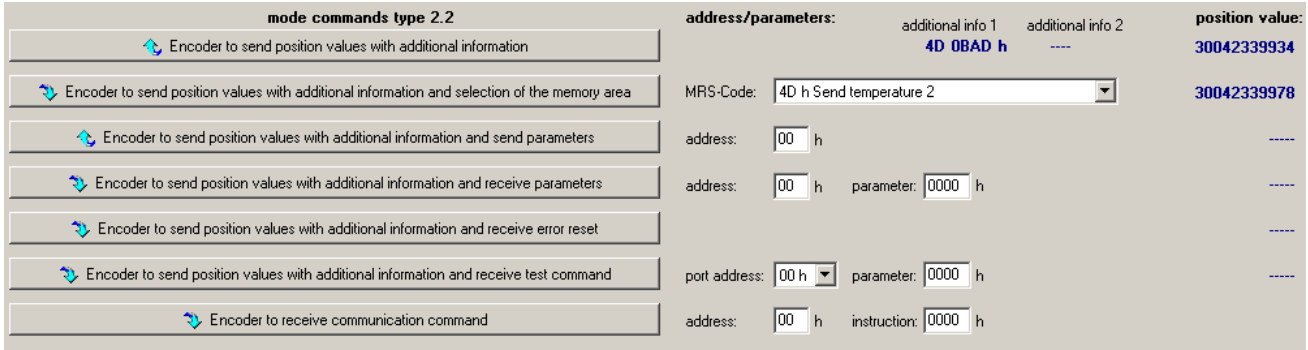


Reading and converting the temperature value as additional information 1

Now the position value and the additional information 1 can be read with the "Encoder to send position values with additional information" mode command.

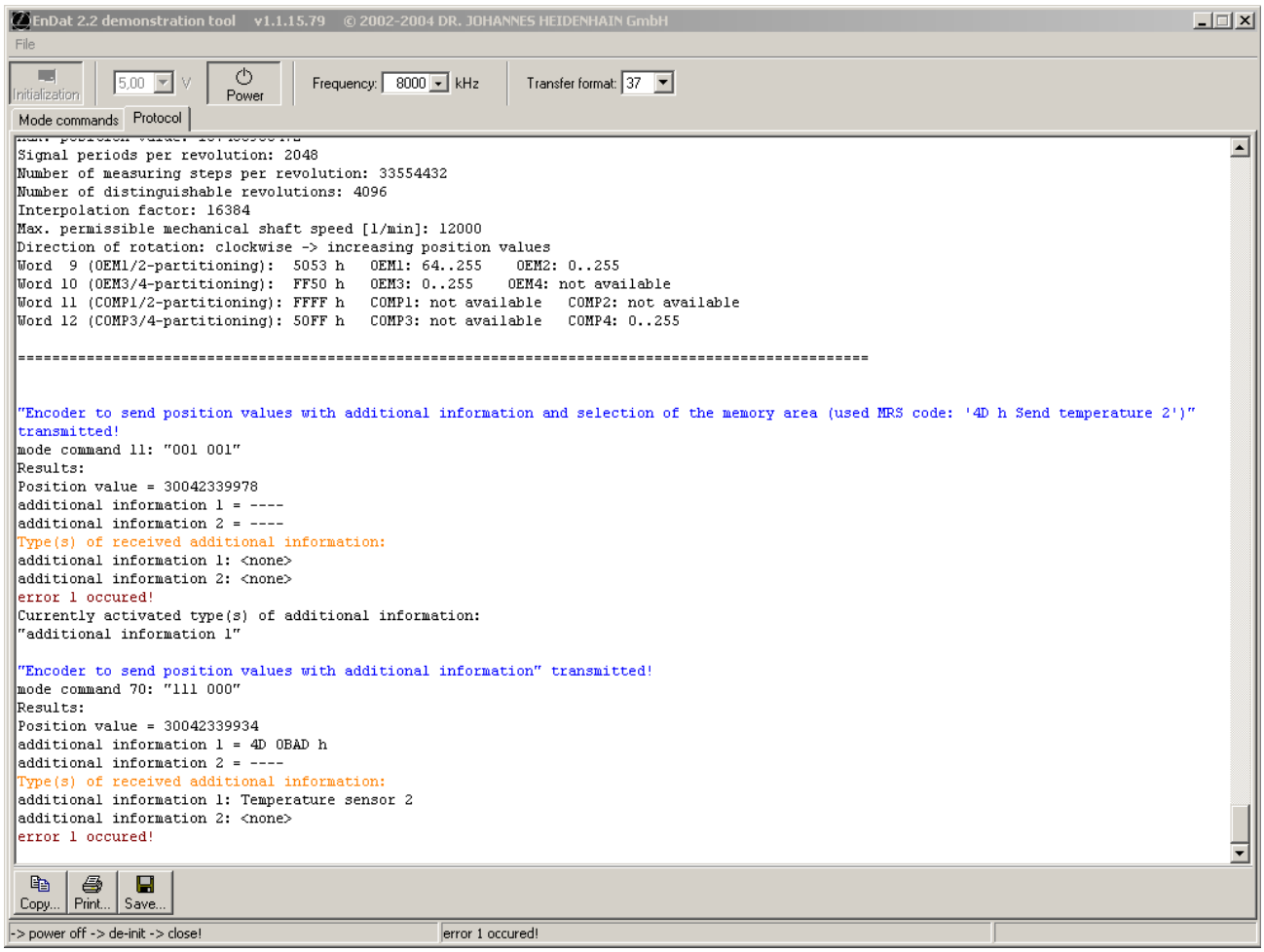
Returned parameters of the additional information 1

- "4D" stands for the MRS code for the temperature 2; this is returned by the encoder as confirmation.
- "0BAD" stands for the temperature information in Kelvin. To convert into °C, the K value must be converted to the decimal system (= 2989) and then scaled by 0.1 (= 298.9), and finally the absolute temperature of 273.1 K must be subtracted by (= 25.8). This means in this case that the encoder has returned a temperature value of 25.8 °C.



Interrogation log

The communication appears on the "Protocol" screen as follows:



This example also shows that the error bit is set ("error 1 occurred!"). This is also shown in the status line. In this example, the error bit was set intentionally and has no effect on the returned parameter.

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