USB to Serial: I need to use a custom speed on your USB-COM, can I do it?

The serial ports on the USB-devices of VScom
provide many more speed configurations as are offered for
selection in typical programs. Especially when connecting
very special hardware there is always the question, whether
the requirements of the hardware are supported by the serial
ports. To get your answer quick just use the new Online Speed Calculator for VScom products.

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The serial ports provide special bitrates 3 Mbit/s and 2 MBit/s to operate. For other bitrates there is a formula to calculate them.

Speed = 24000000 / Divisor

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Speed   : resulting bitrate (bit per seconds)
Divisor : an Integer number, range 16 to 131071
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To get the required Divisor

Divisor = 24000000 / Targetspeed

Test the integer numbers nearest to the resulting Divisor in the upper formula. A resulting bitrate is generally considered acceptable, if the deviation from the target bitrate is less than 2%.

So the lowest possible speed is 184 bit/s. As another result of these conditions each bitrate is in the 2% margin if the Divisor is higher than 25. So in turn every bitrate below 960Â kbit/s is a possible configuration. Only bitrates higher than that need a check with the formula.

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Some models provide an additional range of bitrates. This means the bitrates calculated as above are available on these models, plus some other bit rates calculated by a similar formula:

Speed = 96000000 / Divisor

Use this formula in the same way as above. The Divisor Range is from 16 to 524284.

Further these models provide 12 Mbit/s and 8 Mbit/s as available bit rates.

Of course such high bitrates are not possible using RS232. And even with RS422 or RS485 it is necessary to check the cable parameters. Such transmission speeds are beyond the specifications, but may still be usable.

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Please note: We do not specify which model is capable of this high speed. This depends on the circuits used in the design, and this can change over time. Ask prior to purchase if you definitely need such high speed.

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And here are instructions how to use the speed in Windows [How to configure the serial port of USB-COM for my baudrate? It is not available in the Device Manager.](#)

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