
Board limitations**Board identification**

This errata sheet applies to P-NUCLEO-IKA02A1 electrochemical toxic gas sensor expansion board with CO sensor. See the information below for details.

Table 1. Board summary

Order code	Device info
P-NUCLEO-IKA02A1	Wrong temperature reading Initial gas concentration reading >1000 ppm

1 Limitations

1.1 Wrong temperature reading

1.1.1 Description

The P-NUCLEO-IKA02A1 board embeds the [STLM20](#) ultra-low current precision analog temperature sensor to measure temperature and provide temperature compensation of gas concentration readings.

The voltage provided by the [STLM20](#) should be around 1.575 V at 25°C, but sometimes the reading is wrong.

1.1.2 Workaround

Check if the voltage provided by the [STLM20](#) sensor on pin A5 is around 1.575 V at 25°C.

If you see this voltage but the reading is still wrong, update the ST-LINK firmware update through the [STSW-LINK007](#) tool.

1.2 Initial gas concentration reading > 1000 ppm

1.2.1 Description

Initial reading of the gas concentration exceeds 1000 ppm even if the [STLM20](#) sensor has not been exposed to CO.

1.2.2 Workaround

Some newer batches of P-NUCLEO-IKA02A1 boards have not been equipped with jumper for gain settings.

Check if a jumper is on JP2. If not, put one on positions 2-3: additionally voltage sensed on pins A2 and A3 should be around 430 mV when the [STLM20](#) sensor is not exposed to CO.

Revision history

Table 2. Document revision history

Date	Revision	Changes
03-Jul-2019	1	Initial release.

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