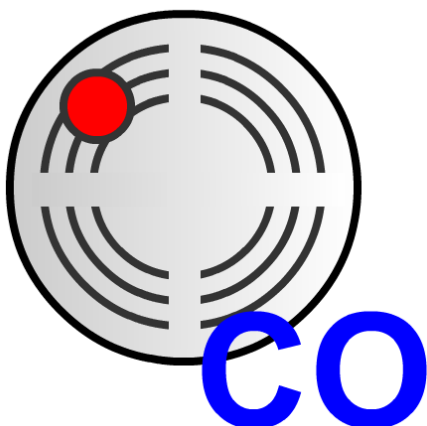


Datasheet GasSensor

CarbonDioxydeSensor & CarbonMonoxydeSensor device

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This document shows technical characteristics of the simulated GasSensor devices.

VERSION

Version	Date	Description
V1.0	20/03/13	File creation
V1.1	15/04/2013	Homogenize properties names

General Description

GasSensor can supply two models of gas sensor which are a standard CO2 sensor and a standard CO sensor.

Gas sensor can be used to detect the air quality in a room and prevent of asphyxiation. We describe in section GasSensor devices Outline methods linked to those devices.

Devices properties

For the CarbonDioxydeSensor,

Property name	Constant name	Value	Default Value	Type	Modifiable
<code>carbonDioxydeSensor.currentConcentration</code>	<code>CARBON_DIOXYDE_SENSOR_CURRENT_CONCENTRATION</code>	[0 - undefined]	0.0	Double	No

Or, for the CarbonMonoxydeSensor,

Property name	Constant name	Value	Default Value	Type	Modifiable
<code>carbonMonoxydeSensor.currentConcentration</code>	<code>CARBON_MONOXYDE_SENSOR_CURRENT_CONCENTRATION</code>	[0 - undefined]	0.0	Double	No

Note: Property currentConcentration are set by default at 0.0. Then this value can take any possible double values.

Physical considerations

There is no physical consideration for this type of device. Indeed, those devices are used to get a physical value. In our case, we do not care about the way the actuator gets this value.

It is necessary to have the global variable named CO2Concentration in a room if you want to use the CarbonDioxydeSensor sensor without getting errors. Likewise, it is required to set the global variable named COConcentration in a room if you want to use the sensor CarbonMonoxydeSensor.

GasSensor devices Outline

Hereafter we explain methods that can be useful for the user to use a gas sensor device.

Interface: **fr.liglab.adele.icasa.device.gasSensor.CarbonDioxydeSensor**

fr.liglab.adele.icasa.device.gasSensor.CarbonMonoxydeSensor

<code>getSerialNumber()</code>	Get the device ID
<code>getCO2Concentration()</code> or <code>getCOConcentration()</code>	Get the current gas concentration of the sensor
