18.5 Virtual device

General

The virtual device is a device that you can use to calculate additional math or keep a counter. It doesn't bind to any protocol and only works when its math expression is used.

> ✅ Virtual device functionality is only available since firmware version v1.6.3, of WCC Lite.

Configuring Virtual device

To configure WCC Lite to use the virtual device you must configure the device and signal sheets.

Virtual device parameters for Device tab:

Parameter	Type	Description	Required	Default value (when not specified)	Range	
					Min	Max
name	string	User-friendly device name	Yes			
description	string	Description of the device	No			
device_alias	string	Device alias to be used in the configuration	Yes			
protocol	string	Selection of protocol	Yes		**virtual**	

Virtual device parameters for Signals tab:

Parameter	Type	Description	Required	Default value (when not specified)	Range	
					Min	Max
signal_name	string	User-friendly signal name	Yes			
device_alias	string	Device alias from a Devices tab	Yes			
signal_alias	string	Unique signal name to be used	Yes			
math_expression	string	Field to calculate specific math. You must enter the signal you want to use.	Yes			

The only field that is a must to use the virtual device is the *math_expression* field. Here you need to enter the signal which you want to associate it with. Some examples of what it can do:

- Hold a specific tag value.
- Calculate a specific math function with many signals, that you can, later on, pass to another device.
- Add tag value to the current value, to create a counter.