

Quick Start of WISE-523x Math Formula Editing Function

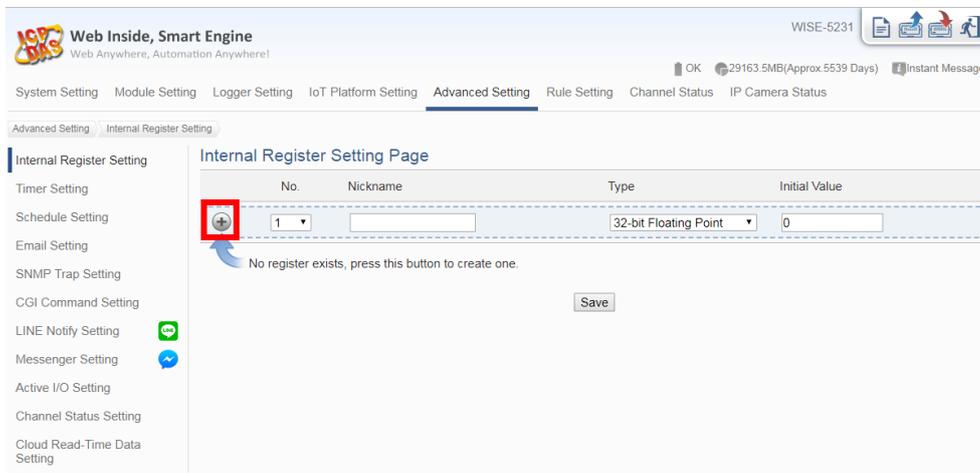
WISE supports math formula editing function after the firmware upgrade version 1.3.0. Users can set I/O channels to be the variables, and use the following operators to edit the formula:

- plus“+”
- minus“-”
- times“*”
- divide“/”
- superscript“^”
- left parenthesis“(” and right parenthesis“)”

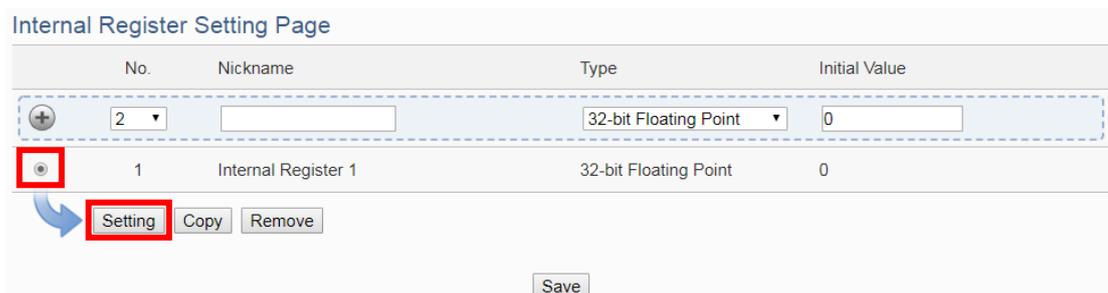
Users can edit different formula in each Internal Register. WISE will calculate the results of all formulas repeatedly, and save the results into the corresponding Internal Registers for IF-THEN-ELSE rule checking or data logging.

The settings are as following steps:

1. Enter “Advanced Setting” → “Internal Register Setting” page, click  to create a new Internal Register.



2. Click on the radio button in front of the Internal Register, and then click on “Setting” to modify the settings.



3. Check “Enable” in the Formula Setting section and edit math formula in the “Content of Formula” field. Users can select the “Interface”, “Module” and “Channel” from the dropdown list and click “Insert” to add a channel value encoded string into the formula, and use the operators as “+”, “-”, “*”, “/”, “^”, “(” and “)” to edit the formula.

Internal Register Internal Register 1 Setting

No. 1

*Nickname

Description

Type

Initial Value

Bit Nickname

Formula Setting

Function Status Enable

*Content of Formula

$$1000 * \text{M-7024 AO0} + 100 * \text{M-7024 AO1} - 20 * \text{M-7024 AO2} / 10^{\text{M-7024 AO3}}$$

The following operators are supported:
 + Plus - Minus * Times / Divide ^ Superscript () Parenthesis

Verification

For example, if user edit a formula as below:

$$1000 * \$C4M6ro0 + 100 * \$C4M6ro1 - 20 * \$C4M6ro2 / 10^{\$C4M6ro3}$$

In the “View” tab, it would be displayed in the real index format of the channel as:

$$1000 * \text{M-7024 AO0} + 100 * \text{M-7024 AO1} - 20 * \text{M-7024 AO2} / 10^{\text{M-7024 AO3}}$$

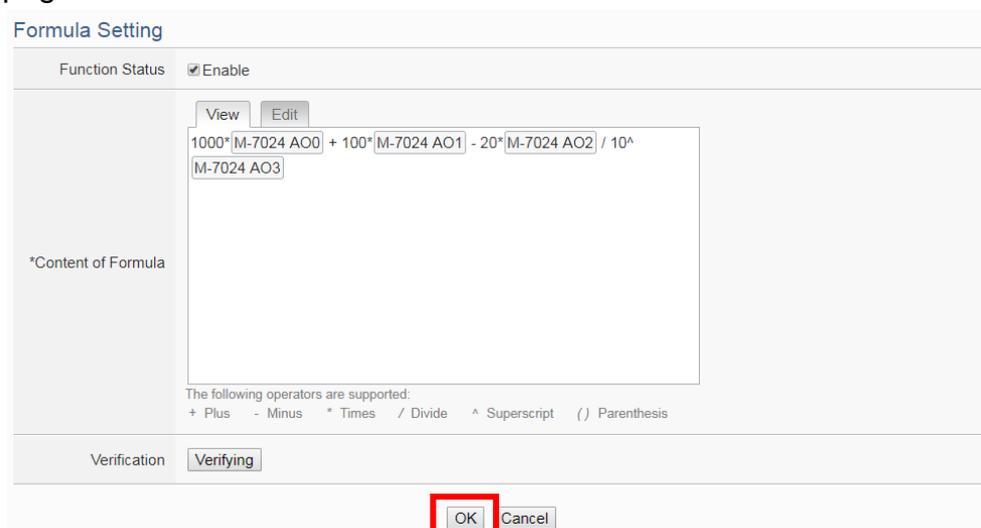
Please note: Do not modify the channel value encoded string when you are editing the formula. It may cause failures when WISE reads the channel value.

- click the “Verifying” button could check the result of the formula.

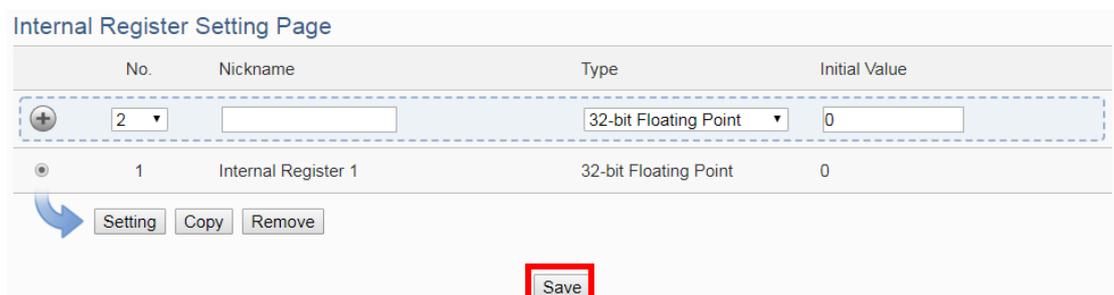


Please note: Before you click the “Verifying” button, please confirm that the I/O module setting is saved to WISE if you use the I/O channels in the formula. Otherwise, the test result would be error because the I/O module is not found.

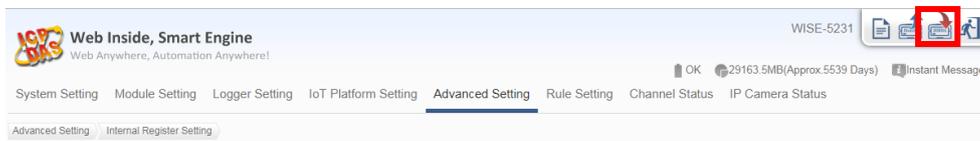
- Click on “OK” to confirm the setting and return to the Internal Register list page.



- After all Internal Register settings are completed, click “Save” button to save the changes.



7. Click the  “Save” button on the right upper of WISE Web page to save all parameter settings to WISE, then WISE will start to calculate the results of all formulas repeatedly.



8. Enter “Channel Status” → “Internal Register” page, the result of the formula is already saved in the Internal Register.

