

Convenient Functions

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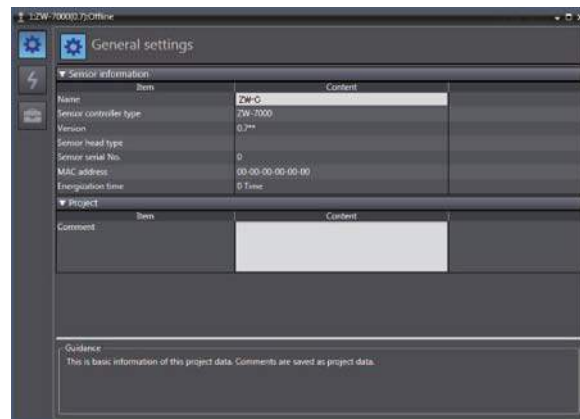
5-1 Checking the Information of the Sensor

Displays the information of the Sensor Controller and Sensor Head.

Item	Displayed item	Setting value	Description
General settings	Sensor information	Name	Displays the name of the Sensor Controller
		Sensor Controller type	Displays the model information of the Sensor Controller.
		Software Version	Displays the version information of the software of the Sensor Controller.
		Sensor head model	Displays the model information of the Sensor Head.
		Sensor serial No.	Displays the serial No. of the Sensor Head.
		MAC address	Displays the MAC address that is set.
		Energization time	Displays the energization time of the Sensor Controller.

- ▶ **Multi View Explore** : [(ZW model name)] (double click)
- **Edit pane** : [General Settings] icon (⚙️)

1 The Edit pane main pane is displayed in the Edit pane.
 You can check the above information under [General settings] - [Sensor information].



5-2 Storing the light reception wave form in a file

The light reception wave form can be stored in a file as a record of the measurement state.

Item	Output items	Description
RegionNo	Area1 / Area2	Indicates the measurement area. Area1: Measurement Area 1, Area2: Measurement Area 2
StartPosition	-2.500 to 2.500	Indicates the start position [mm] for the measurement area.
EndPosition	-2.500 to 2.500	Indicates the end position [mm] for the measurement area.

- ▶ **Multi view Explore** : [Device Group] | [(Sensor Name)] (right click) | [Sensing monitor]
- ▶ **Multiview Explorer** : [Device Group] | [(Sensor Name)] (double click)
- **Edit Window** : [Online]-[Monitoring]-[Sensing monitor start]

1 Select the line bright storage icon ().

Input the name of the file to export to.

A CSV format file in the following format is output.




RegionNo	Area1 / Area2
StartPosition	Measurement area (start)
EndPosition	Measurement area (end)
Position	Value
0	(Amount of light received 0)
1	(Amount of light received 1)
2	(Amount of light received 2)
3	(Amount of light received 3)
:	:
254	(Amount of light received 254)
255	(Amount of light received 255)

5-3 Recovering calibration ROM data

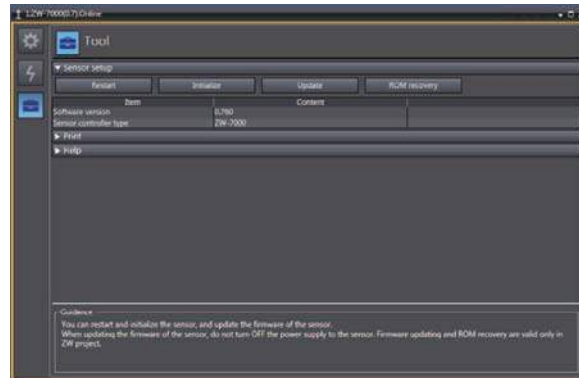
If an abnormality occurs in the sensor's calibration ROM, you can recover the backed up calibration ROM data into the sensor.

1 Set the operating mode to the FUNC mode.

 3-2 Switching operation modes p.90

- ▶ **Multi view Explore** : [Device Group] | [(Sensor Name)] (double click)
→ **Edit pane** : [Tool] icon ()

2 Click the [ROM recovery] in [Sensor setup]. Select the calibration ROM backup data file.



Important

- The calibration ROM data is different for each sensor serial number. Select the backup file that matches the sensor serial number. Measurement will not be correct unless they match.
- As a temporary measure if the Calibration ROM is lost, or fails, the measurement can be restarted using the last loaded Calibration ROM data according to the following procedure.

<Operating procedures>

- Hold the button while [NO.ROM] is displayed on the sub digital. Press the ZERO/SET key after [OK/CAN] is displayed.

<Note>

- Confirm that the serial number of the Calibration ROM which is loaded is the same as the serial number of the Sensor Head by checking the Controller Information.
- If the serial numbers are not the same, measurement cannot be performed correctly.
- When restarting the Sensor Controller, perform the same procedures again.
- For a Displacement Sensor which has never been inserted or launched, this operation is disabled.

5-4 Printing the contents of settings

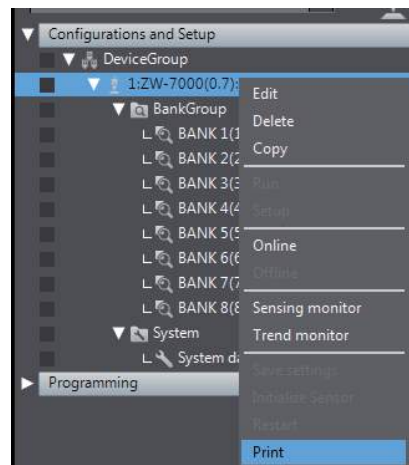
You can print the contents of bank data and system data settings.

Item	Setting item	Mode	Description
Print	Target data	All information	The sensor information, bank group data, and system data are all printed.
		Sensor information	The sensor information is printed.
		Bank Group	The bank group data (Banks 1 through 8) is printed.
		Bank Data	The specified bank data is printed.
		System Data	The system data is printed.
	Bank number	1 to 8	If bank data is selected as target data, specify the bank number to print the data for.

► Multi view Explore : [Device Group] | [(Sensor Name)] (right-click)

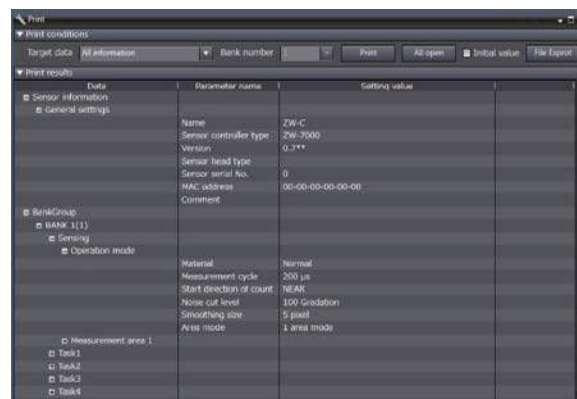
1 Select [Print].

The [Print] window is displayed on the Edit pane.



2 Select the data to print.

From [Target data], select the data to print. Select and expand the parameters to print. If you click [Expand All], all the parameters are expanded. To print the default values as well, check the [Display Default Values] checkbox.



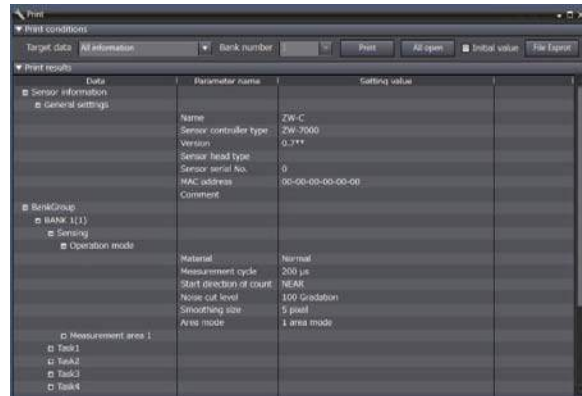
Important

Only the expanded parameters are printed.

Note

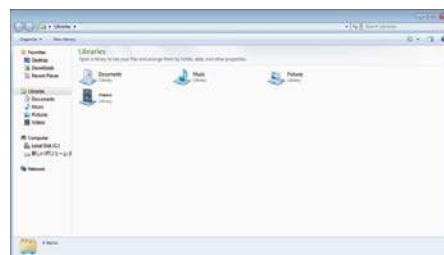
- The set contents of parameters can be output in CSV file format.

1 Click [File output] button.



2 Enter the file name to save it to the desired folder.

The parameters are opened and output to the file.



- CSV file output is as follows.

Item	Property Name	Target Data
Sensor information		
General settings		
	Name	ZW-7
	Sensor Controller model name	ZW7000
	Version	1.2**
	Head model name	0
	Head serial No.	00-00-00-00-00-00
	MAC address	
	Comment	
Bank group		
BANK 1(1)		
Sensing		
Operation mode		1 area
	Area mode	Normal
	Material	100 tones
	Background removal level	5 pixels
Measurement area 1		

5-5 Control input signal with PC tool

Following input signal can be controlled with PC tool.

- LIGHT-OFF
- TIMING
- RESET
- ZERO

- ▶ **Multi view Explore** : [Device Group] [(Sensor Name)] (right click) [Sensing monitor]
- ▶ **Multiview Explorer** : [Device Group] [(Sensor Name)] (double click)
- **Edit Window** : [Online]-[Monitoring]-[Sensing monitor start]

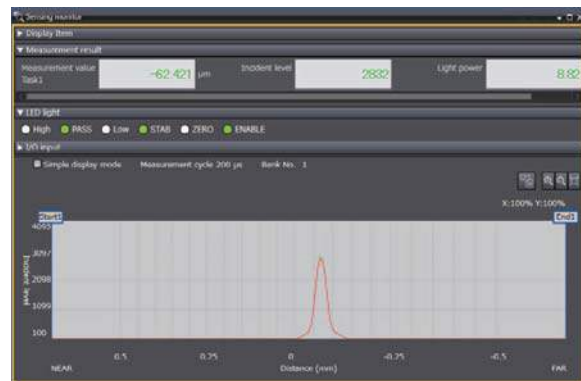
1 [I/O input] is opened.

2 If each button is clicked, the **Sensor Controller is controlled as corresponding input signal is turned ON.**

While the button is clicked, corresponding input signal is status ON.

If the button is clicked again, the input signal is turned OFF.

Button	Effect
LIGHT-OFF	The measurement LED is turned OFF.
TIMING	The TIMING input is turned ON.
RESET	The RESET input is turned ON.
ZERO	The ZERO input is turned ON.



Note

Some adjustments can only be made while in FUNC mode.
When in RUN Mode, [I/O input] is not displayed.

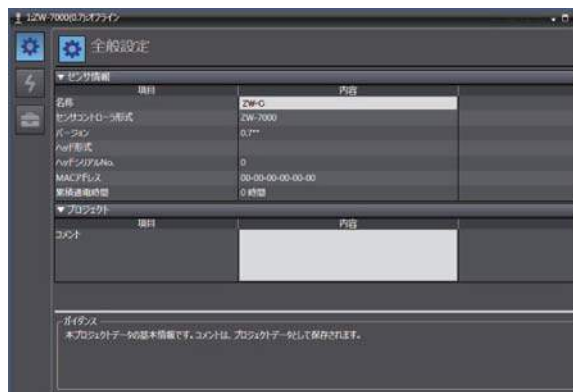
5-6 Viewing the Energization Time

You can check the energization time of the sensor controller from the factory-installed.

Items	Specification
Display unit	hore
Update interval	1 hore

- ▶ **Multiview Explorer** : [(ZW model name)] (double click)
→ **Edit pane** : [General Settings] icon (⚙)

- 1** The Edit pane main pane is displayed in the Edit pane.
You can view the energization time under [General settings] - [Sensor information].



Important

With ZW-7000□, this function is not available when the factory-installed firmware version is 2.100 or earlier.

With ZW-5000□, this function is available for all versions.

When the firmware has been updated from the version 2.100 or earlier or when the energization time cannot be recorded due to a non-volatile memory hardware malfunction, "-----" is displayed in the Energization time field.

Note

The energization time can be viewed by key operations on the Sensor Controller.

 "Search from Menu Tree p.192"

5-7 Selecting Measured Values to be Externally Output

You can select the data to be output from the following routes:

- Analog output
- Digital output


Note

Selected data in Digital Output setting becomes the measurement object of the following functions:

The data selected in the Digital Output setting are to be output by internal logging, fieldbus output (EtherCAT/EtherNet/IP), or serial data output.

Assigning digital output

Refer to the following chapter:

-  2-1 Connecting Parallel I/O in Confocal Fiber Type Displacement Sensor ZW-7000 series User's Manual for Communication settings (Cat. No. Z363).

Assigning analog output

Refer to the following chapter:

-  “2-1 Parallel I/O connection” described in Displacement Sensor ZW-7000 series Confocal Fiber Type Displacement Sensor User's Manual for Communications Settings (Z363)

MEMO