

Remote Control Unit

Operation Manual



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1. Reading Labels

Thanks for purchasing FineTek's Product. This operation manual describes the product features, working principles, operation and maintenance methods. It makes the user fully understand how to use the product correctly, so as to prevent dangerous situations such as device damage or operator injury.

- Please read this operation manual completely and carefully before using the product.
- > Please contact the company if this operation manual can't satisfy your demands.
- The content of the operation manual is updated based on the version upgrade, which will be uploaded to the website for the user to access.
- Please don't disassemble or repair the product on your own, as this will make you disqualified from availing of the warranty service. Please send the product back to the company for repair and calibration, or just contact the company.
- Explanation of warning signs:



Danger \rightarrow It indicates that wrong operation will cause death or major disasters.



Note \rightarrow It indicates that wrong operation will cause injury and device damage to some extent.



Electric shock \rightarrow It warns of possible electric shock.



Fire \rightarrow It warns of possible fire.



 $\label{eq:prohibited} \mbox{Prohibited} \rightarrow \mbox{It indicates the prohibited wrong behavior}.$

2. Product Warranty

2.1 New Product Warranty

- We don't charge for the inspection, part/s and repair for the product of the company that has a defect within 12 months from the delivery date and meets the warranty terms.
- If the product defect is not due to human error during its transportation, user may change to a new unit from the company within 7 days from delivery date.
- When the product needs to be sent back to the factory for repair, please send the whole set, and don't disassemble the parts. Moreover, please be sure it is completely packed to avoid damage and causing more loss and defect during the transportation.
- The warranty is not available for causes that fall under the following circumstances, for which the company shall charge for the inspection, part/s and repair according to the actual condition:
- The product or its parts are beyond the warranty period.
- Fault or damage is caused by not following the instruction and use environment described on the operation manual.
- The product damage is caused by a force majeure factor (natural disasters, floods, fire, earthquakes, lightning, typhoon, etc.), human destruction (scratches, dropping, latch broken, tapping, cracks and punching), human error (using improper voltage, high-humidity, water leakage, stain, corrosion, loss, improper storage, etc.) and other abnormal factors.
- The damage is caused by the customer or the 3rd party through the installation, addition, expansion, modification and repair of parts not authorized or certified by the company.
- The volume label information is wrong or unclear, so the product serial number can't be confirmed.

2.2 Repair Warranty

A **6-month** warranty service is provided for the repaired part of the product, during which the same product can be repaired free of charge in case of the same fault.

2.3 Service Network

Company	Address	Telephon	Fax
Taipei Headquarters (Taiwan)	No.16, Tzuchiang St., Tucheng Industrial Park, New Taipei City 23678	+886 2-2269-6789	+886 2-2268-6682
Taichung Sales office (Taiwan)		+886 4-2465-2820	+886 4-2463-9926
Kaohsiung Sales office (Taiwan)		+886 7-333-6968	+886 7-536-8758
Fine automation Co., Ltd. (China)	No. 451, Duhui Road, Zhuanqiao Township, Minhang District, Shanghai City 201109	+86 021-64907260	+86 021-6490-7276
FineTek Pte Ltd. (Singapore Branch)	37 Kaki Bukit Place, Level 4 Singapore 416215	+65 6452-6340	+65 6734-1878
FineTek GmbH (Germany Branch)	Bei den Kämpen 26 21220 Seevetal-Ramelsloh, Germany	+49 (0) 4185 8083 0	+49 (0) 4185 8083 80
FineTek Co., Ltd. (Indonesia Branch)	PERGUDANGAN TUNAS BITUNG JL. Raya Serang KM. 13,8, Blok C3 No. 12&15, Bitung Cikupa, Tangerang 15710	+62 021-2958-1688	+62 021-2923-1988

3. Product Introduction

3.1 Working Principle

The Remote Control Unit (RCU) is a controller that uses RS-485 communication to read and control connected instruments/ sensors. All data received are displayed on the RCU. The RCU, as a Middle Master, can transfer the data to the PC. Smart and easy-to-use, the RCU allows users to efficiently revise parameters of instruments/ sensors and then monitor. With ModBus Potocol and FineTek's unique Auto ID, the RCU is designed to be used in any of our company's sensors.

3.2 Application

- May be used indoors, not limited to the control center room. It can also be used outdoors the temperature is within -40°C ~85°C.
- > The RCU can be connected to a maximum of 128 sensors.
- The RCU can monitor the operation status of all connected sensors in real time, including Alarm.
- The RCU has a variety of functions for easy setting, which allows users to set parameters of all connected sensors simultaneously instead of one-by-one.

3.3 Product Features

- Utilizes ModBus Potocol and FineTek unique Auto ID.
- > Driven by a microprocessor, user-friendly with complete functions.
- Power Input: 20~250Vdc/ Vac.
- Communication interface: RS-485.
- Relay output: SPDT 3A/250Vac x 1 (connected sensors has an output when alarm signal occurs).
- LED measuring indicator (Green): Lights on while any sensor connected is measuring
- LCM (Graphic: 128x64 Dots)
- LED Indicators: Master (Red): Normal connection with the sensor.
- Slave (Red): Normal connection with the PC.
- ZigBee (Red): Normal connection with the sensor via ZigBee (lights off when Master is on)
- > Alarm (Red): Alarm signals detected
- Effective communication range: 200 meters
- Two units of RS-485.
- User setting adjustability.
- Region of Interest (ROI) function: allows users to filter or set the sensor.

3.4 Product Testing & Protection

- Protection Level: IP65 (IEC60529)
- ➢ High Voltage Test: IEC60947-2
- Insulation Resistance Test: IEC60092-504
- Power Supply Test: IEC60092-504
- Power Supply Failure Test: IEC60092-504

3.5 Structure



RCU Structure Overview

4. SPECIFICATION

4.1 Technical Specifications

NO.	ITEM	DESCRIPTION
1	POWER SUPPLY	DC/AC 20V~250V
2	MAXIMUM CURRENT	200mA~250mA(Condition:contect 128 sensor)
3	AMBIENT TEMPERATURE	-40°C - 85°C
4	OPERATION TEMPERATURE	-40°C - 85°C
5	PROTECTION STANDARD	IP65
6	BODY MATERIAL	PP
7	DISPLAY	LCM 128*64 dots Graphic Display
8	RELAY OUTPUT	SPDT 3A/250V X 1 (Sensor_alarm*1 (Sending an alarm signal)
9	COMMUNICATION INTERFACE	1
10	LED INDICATORS	1
11	EFFECTIVE RANGE	Up to 200m
12	OTHER	 Real-Time Clock User to Set up Region of interesting(Parameter Copy) All device Setting (Parameter Copy)

4.2 Ordering Information

RCU Serial Number



Example:

RCU-110-11

Instructions: This RCU model uses RS-485 communication and is connected to the sensor. It is suitable for use with the EE310 heavy hammer series and has a set of relay alarm output.

4.3 SENSORS CATEGORIES

4.3.1 EE Electromechanical level measuring system

4.4 Communication Interface Description

4.4.1 RS-485

Application range: RCU basic communication uses RS 485 wired communication with maximum transmission distance of 200 meters.

4.5 Alarm Alert Description

- The relay will detect the abnormal status of all sensors connected to the RCU. The abnormal status is defined by the sensor. For example, when the hammer is connected, it will detect any abnormal status during embedding, disconnection, feed protection etc.
- > The relay will trigger the alarm when the sensor RS 485 communication is disconnected.

4.6 DIMENSION BODY



COVER





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° 0

5. PRODUCT INSPECTION



5.1 Opening the box

- Before opening the package, please check that the outer packaging is not deformed or damaged. If there are any package deformities or damage, please take photos or videos as evidence during submission of claims.
- > After unpacking, please check the products. Take photos of any deformities or damage.
- > Check that the contents are as ordered including quantity.
- If product has any abnormalities, please contact our customer service (together with photo or video evidence) within 7 days from receipt of goods

5.2 Handling and Transportation

- Before opening the package, please check that the outer packaging is not deformed or damaged. If there are any package deformities or damage, please take photos or videos as evidence during submission of claims.
- > After unpacking, please check the products. Take photos of any deformities or damage.
- > Check that the contents are as ordered including quantity.
- If product has any abnormalities, please contact our customer service (together with photo or video evidence) within 7 days from receipt of goods.
- > Do not press or drop the package, it may cause damage to the product.
- Do not pull the steel cable forcefully which may result in deformation, fracture or repositioning from normal place.
- Use a crane if products are transported from a high height. The rope must pass through the lifting ring and be bound to prevent it from falling.

6. INSTALLATION INSTRUCTIONS



6.1 Installation Location

6.1.1 Choose a location where sunlight will not directly fall on the RCU as it may result in user being unable to read the LCD panel clearly.



6.1.2 A proper shelter from rain is needed. Continuous corrosion from rain will cause deterioration and permeation of water.



6.2 How to Install

The interfaces in the network must be consistent.

6.3 PRECAUTIONS

- Adding new sensors into the network requires the RCU to re-scan hardware. (Parameters under ROI will be cleared accordingly.)
- The cable must pass through the outlet connector, and the nut tightened to meet protection standards.
- Make sure that every screw on the RCU body is securely tightened, or pressure differences may cause dust to enter.
- > Avoid opening the cover unless there is an emergency.

6.4 Wiring Up & Display Instructions

6.4.1 System Flowchart

The RCU is equipped with three RS-485 terminals and one relay output terminal. Usage and definitions are as follows:

- Power Input: 20~250Vdc/Vac
- Relay Output: SPDT 3A/250Vac x1
- Operation Indicator: LED green light indicates that the connected sensor is being measured.
- RS-485 Indicators: Slave LED Red light flashes means that the RCU is commuting with the PC. Master LED Red light flashes means that the RCU is communicating with the sensor.
- ZigBee wireless communication instructions.
- Alarm Indicator: Alarm LED red light flashes means that the connected sensor has an abnormality (alarm, error, or communication disconnection on the sensor.)
- > Three RS-485 terminals and one relay output terminal.



FineTek Co., Ltd. Is not responsible for installation and will only provide technical recommendations. For installation, maintenance, or other technical service, please contact well-trained or certificated technicians. Improper operation can lead to mechanical damage and human injury.

6.4.2 How to wire up terminals



6.4.3 Description and Precautions

Terminal no.	Item	Description
1.2	S485	RS-485 terminal for the PC (S485+ S485-)
3.4.5.6	M485	RS-485 terminal for the sensor (M485+ M485- M485+ M485-)
7.8	Relay output	Sensor's alarm, error, disconnection output(NO1、COM1)
9.10	LN	Power input (20~250 Vac/Vdc L N)



 Soft lead wires of 0.75mm² are highly recommended, as hard lead wires may damage the PCB. Single-core wires or 7-strand wires are not allowed as they are too hard and may damage the circuit board. The power wires and signal wires should be separated. The signal wires should be isolated cables.



- The stripped length of the wire should not be too long as it may cause short circuit. The stripped part should be crimped with solder or needle-shaped insulated terminals. There should be no branching that may cause a short circuit.
- Each wire/ cable needs to be clearly marked and connected correctly. Any error may cause injury or mechanical damage.

7. OPERATION

7.1 RCU Flowchart (Parameters)



7.2 Panel Function Description and Flowchart (single data mode)



	(1)	(2)		(3)
	FINE	-TEK			001
	(4)	9	8.4	43	3
(5)	< <a1< th=""><th>arm</th><th>List</th><th>(6)</th><th>FT</th></a1<>	arm	List	(6)	FT
(7)		\bigcirc		\bigcirc	
	Alarm	ZigBee	Slave	Master	Measure



No.	Item	Description		
(1)	Supplier	FineTek Co Ltd		
(2)	Status	Status of the sense	sor's alarm	
(3)	Sensor ID	ID of sensor		
(4)	Display Value	Current value of s	sensor	
(5)	Alarm	Prompts when se	nsor sends an alarm signal 。	
	Diambas I la it	The measuring u	nit used by RCU (in both display & setting). Two types of measuring	
(6)	Display Unit	units: meter or fee	et	
		Alarm	Alarm signal detected	
		ZigBee		
(7)	LED Indicators	Slave	Displays current communication status with the PC via RS-485	
		Master	Displays current communication status with the sensor via RS-485	
		Measure	Sensor measuring	
(8)	Buttons		Up Key (UP) = The main screen of the previous sensors will be displayed, sorted by ID. Increase when in number mode, or Up when in menu mode.	
			Left-shift Key (LEFT) = if the (5) Alarm prompt appears, you can enter the Sensor Alarm menu. If there is no Alarm prompt, this button will have no effect.	
			DOWN key (DOWN) = The main screen of the next sensor will be displayed, sorted by ID. Decrease when in number mode, or Down when in menu mode.	
			Right-shift Key (RIGHT) = In the main screen, you will enter the password page of the RCU parameter setting. The cursor mode will point to the right.	
		ESC	Escape Character: Enter to Hardware Refreshing in the main page, or back to the previous page while in the number-entering page	
		ENT	Enter: Enter to Password while in the main page, or save and get to the next page while in number-entering page	

7.3 Panel Function Description and Process (4 data mode)

		(1)	(2)			
(3)	FIN 001 (4) 003 (5)	IE-TEK DEC 19.21 m ISS 08 % DEC 09.80 m ISS 00 %	0002 DE 19.09 M 035 45 7 004 DE 09.13 M 034 50 7			
-	Alarm	ZigBee Slav	7e Master Measure	(7) ESC ENT		
	NO.	ITEM	DESCRIPTION			
	(1)	Supplier	Finetek Co Ltd			
	(2)	Alarm Signal	Displayed while the	sensor sends an alarm signal		
	(3)	Sensor ID	ID of sensor curren	ID of sensor currently being displayed.		
	(4)	Value & Unit	The value and unit	The value and unit of current sensor.		
	(5)	Measurement	The percentage measured by current sensor, corresponds to			
	(5)	Percentage	DEC or ADD mode	respectively.		
	(6)	Model	The display mode of	of the current sensor. The setting is related to		
-	(0)		the display value and percentage.			
			Alarm	Alarm signal detected		
		I FD	ZigBee			
	(6)	indicators	Slave	Connection with the PC via RS-485		
			Master	Connection with the sensor via RS-485		
-			Measure	Sensor measuring		
(7)			ESC ENT	Back to 1 datum/ page		
	(')	Bullons		Previous/ forward: See the last or next page to show another four data		

7.4 RCU Parameter-changing flowchart



"Change settings" comes after the boot screen, Use 🖍 🔽 to choose and then

click to confirm.

YES>> The RCU now is refreshing hardware. Parameters under UUC will be cleared.

NO>> Get to the next page

Remark: The RCU will directly jump to the next page provided that there is no action

for 10 seconds



(6) DEFAULT → To return to the default setting

RCU default settings:

Interface to the sensor: RS-485	Refreshing time of main page: 6S
BaudRate to the sensor: 9600	Format: One datum/ one
Scan Number to the sensor: 20	page Unit: Meter
BaudRate to the PC: 9600	LCM backlight: 120 SEC
RCU ID for PC: 001	Language: English
Format for PC: RTU	ROI:Cleared
Move the cursor by using \frown	. Click $[ENT]$ to get to the next page.

(1) ROI SETTING)

VARS SETTING 1	ROI SETTING	1.1
▶ ROI SETTING CONNECT SETTING MAIN DIS MODE LANGUAGE	▶ RESET ROI ADD ROI	

Select ROI setting (for ROI option, press the $\begin{bmatrix} ENT \end{bmatrix}$ key to enter the settings page).

The ROI Settings page is divided into the following segments:

(1) RESET ROI \rightarrow This option is used to reset the regions for all ROIs.

(2) ADD ROI \rightarrow This option is used to add or change the region of ROI.

※ For details, please refer to the operation manual parts 7.5 and 7.6 ROI Setting process.

(2)CONNECT SETTING



Choose CONNECT SETTING and click $\begin{bmatrix} ENT \end{bmatrix}$ to do the settings.

CONNECT SETTING 2.1	CONNECT SETTING 2.2
➡ CONNECT DEVICE	CONNECT DEVICE
CONNECT PC	➡ CONNECT PC

The CONNECT SETTING page provides the following setting options:

(1)CONNECT DEVICE) → To do the communication settings between the RCU and the sensors connected. The RCU serves as a Master here.

(2)PC(CONNECT PC) \rightarrow To do the communication settings between the RCU and the PC. The RCU serves as a Slave here.

(2-1)CONNECT DEVICE



The CONNECT SETTING page provides the following setting options:

(1)INTERFACE) \rightarrow To choose RS-485. The communication interface of the connected sensor cannot be mixed.

(2)BAUDRATE) → BaudRate to the sensor

(3) SCAN NUMBER) \rightarrow To limit the sensor quantity that the RCU will re-fresh.

The more sensors you choose, the more time it takes.



Choose INTERFACE and click $\begin{bmatrix} ENT \end{bmatrix}$ to do the settings.

INTERFACE	2.1.1.1	
▶ • RS-485		
Use to ch	oose the inter	face, and click ^{LENT} to confirm.
Click Esc to get ba	ck to the last p	page without saving. Remark: default RS-485

(2-1-2)BAUDRATE)



(2-1-3)SACN NUMBER)
SCANLET DEVICE 2.1.3
INTERFACE BAUDRATE SCAN NUMBER
Choose SCAN NUMBER and then click ENT to do the settings.
SCAN NUMBER 2.1.3.1
005
Use S to move on to the digit that is to be adjusted. Use S to increase or
decrease the digits, ranged from 1~128. Click [ENT] to confirm; click [ESC] to get back to the
last page without saving.
Remark: Default 128

(2-2)CONNECT PC



Choose CONNECT PC and click $\begin{bmatrix} ENT \end{bmatrix}$ to do the settings.

Below are the various parameter setting options:

(1)ADDRESS \rightarrow To set up the ID of the RCU itself for the PC to read data.

(2) BAUDRATE \rightarrow BaudRate to the PC.

(3)FORMAT \rightarrow Format of the connection to the PC.

(2-2-1)ADDRESS

CONNECT PC 2.2.1	ADDRESS 2.2.1.1					
► ADDRESS BAUDRATE FORMAT	001					
Choose ADDRESS and then click ENT to do the settings. Use \checkmark to move onto the digit that is to be adjusted. Use \checkmark to increase or decrease the digits, ranged from 1-255. Click ENT to confirm: click ESC to get back to the						
last page without saving. Rema	rk: default 001	-				

(2-2-2)BAUDRATE

CON	INECT PC	2.2.2	
	ADDRESS		
₩	BAUDRATE		
	FORMAT		

Choose BAUDRATE and click $\stackrel{[ENT]}{=}$ to do the settings.

BAUDRATE	2.2.1.2
1200	9
▶ 2400	3
4800	3
≠ 9600)

Use to choose the preferred BaudRate, and then click to confirm. Click to get back to the last page without saving. Remark: default 9600 (For PC)



Remark: Default RTU (For PC)

(3)MAIN DIS MODE



- (1) DISPLAY RATE → To set up the refreshing time of the main page: DISABLE, 4, 6, or 8 seconds.
- (2) DISPLAY FORMAT → To choose "one datum/ one page" or "four data/ one page" to be displayed in the main page
- (3) DISPLAY UNIT → To choose the unit "Meter " or "Feet" that is to be displayed in the main page.
- (4) LCM BACKLIGHT \rightarrow To adjust the illumination time of the backlight.



Remark: Default one information

(3-4)LCM BACKLIGHT
MAIN DIS MODE 3.4 DISPLAY RATE DISPLAY FORMAT DISPLAY UNIT IN BACKLIGHT
Choose LCM BACKLIGHT and click ENT to do the settings.
LCM BACKLIGHT 3.4.1
12 <u>0</u>
Use 🗴 ≥ to move on to the digit that is to be adjusted. Use 🛆 💌 to increase or
decrease the digits, ranged from 1 to 999. Click ENT to confirm; click ESC to get back to the
last page without saving. Remark: Default 120 SEC
(4)PASSWORD CHANGE
RCU SETTING 4 UUC SETTING CONNECT SETTING MAIN DIS MODE ▶ PASSWORD CHANGE
Choose PASSWORD CHANGE and click ENT to do the settings.

The PASSWORD CHANGE page provides the following setting options

PASSWORD CHANGE 4.1	PASSWORD CHANGE 4.2
▶ RCU PASSWORD USER PASSWORD	RCU PASSWORD ▶ USER PASSWORD

(1) RCU PASSWORD \rightarrow To get the access to the RCU parameters.

(2) USER PASSWORD \rightarrow To get the access to the sensor parameters.

(4-1) RCU PASSWORD
PASSWORD CHANGE 4.1
▶ RCU PASSWORD
USER PASSWORD
Choose PASSWORD CHANGE and click ENT to do the settings.
RCU PASSWORD 4.1.1
0000
Use 🗴 ≥ to move onto the digit that is to be adjusted. Use 🛆 ⊻ to increase or
decrease the digits, ranged from 0 to 9999. Click ENT to confirm; click ESC to get back to
the last page without saving Remark: Default2123
After changing the RCU password, please remember the password to avoid losing access

to the RCU parameter setting.

(4-2) USER PASSWORD PASSWORD CHANGE 4.1 → RCU PASSWORD USER PASSWORD USER PASSWORD and click ^{ENT} to do the settings. USER PASSWORD 4.2.1 00000 Use ✓ > to move on to the digit that is to be adjusted. Use ✓ ✓ to increase or decrease the digits, ranged from 0 to 9999. Click ^{ENT} to confirm; click ^{ESC} to get back to the last page without saving. Remark: Default 8013

(5)LANGUAGE)	
RCU SETTING5CONNECT SETTINGMAIN DIS MODEPASSWORD CHANGE► LANGUAGE	
Select (LANGUAGE) by pressing	key on the settings page.
LANGUAGE 5.1	
▶ ✓ ENGLISH TRADITIONAL SIMPLE	
You can use You can use You can use	select the desired system language. Press ENT to save the
setting. Press Esc to save the se	etting. Press ESC to return to the previous page without
changing the setting. The default	language is English.

(6) DEFAULT

RCL	J SETTING	6	
	MAIN DIS	MODE	
	PASSWORD	CHANGE	
	LANGUAGE		
••	DEFAULT		
Choo	se DEFAULT	and click ENT	to do the settings.

DEVICE RESET 6.1	
▶ NO	
YES	
Use to choose the pref	Ferred option and click ENT to confirm. Click ESC to get
back to the last.	

7.5 ROI Region of Interest



7.6 ROI Region of Interest





Finally, click ^{ESC} to exit the new ROI page. An indication on the display will show that the setting is complete. above actions.

(2) Clearing ROI



On the ROI settings page, select Clear ROI and click ^{ENT} clear all the regions that have been set.

7.7 ModBus address table

(ex : 10 DEVICE by AUTO ID)

Address	Variable	Remark	Item	R/W
0x1000	Company Code 1	auto_id	'FI'	R
0x1001	Company Code 2		'NE'	R
0x1002	Company Code 3		'-T'	R
0x1003	Company Code 4		'EK'	R
0x1004	Product type	stc_pfc_auto_id	RC	R
0x1005	Product No.	stc_pfc_auto_id	0x0001	R
0x1006	roduct No.	stc_pfc_auto_id	0x0001	R
0x1007	Connect_device_id[0]		ID 1~16	R
0x1008	Connect_device_id[1]		ID 17~32	R
0x1009	Connect_device_id[2]		ID 33~48	R
0x100A	Connect_device_id[3]		ID 49~64	R
0x100B	Connect_device_id[4]		ID 65~80	R
0x100C	Connect_device_id[5]		ID 81~96	R
0x100D	Connect_device_id[6]		ID 97~112	R
0x100E	Connect_device_id[7]		ID 113~128	R
0x100F	Total_Variable_device		0~128	R
0x1010	Total_Variable_device		0~65536	R
0x1011	TDisplay Value (Low address)		0~65536	R
0x1012	Unit Type		none	R
0x1013	system status error[0]			R
0x1014	system status error[1]			R
0x1015	system status error[2]			R
0x1016	system status error[3]			R
0x1017	system status alarm[0]			R
0x1018	system status alarm[1]			R
0x1019	system status alarm[2]			R
0x101A	system status alarm[3]			R
0x101B	DDF Device		0x1049	R
0x101C	Starting poison of variables		0x1020	R
	(read only			
0x101D	Length of variables (read only)		10	R
0x101E	Length of variables (read only)		0X102A	R
0x101F	Length of variables (read and write)		31	R

DEVICE_1(AUTO ID)

0x1020	device_1 Company Code 1	'FI'	R
0x1021	device_1 Company Code 2	'NE'	R
0x1022	device_1 Company Code 3	'-T'	R
0x1023	device_1 Company Code 4	'EK'	R
0x1024	device_1 Product Type		R
0x1025	device_1 Product No		R
0x1026	device_1 Product Version		R
0x1027	device_1 display_value1(H)		R
0x1028	device_1 display_value1(L)		R
0x1029	device_1 uint_type1		R
0x102A	device_1 display_value2(H)		R
0x102B	device_1 display_value2(L)		R
0x102C	device_1 uint_type2		R
0x102D	device_1 display_value3(H)		R
0x102E	device_1 display_value3(L)		R
0x102F	device_1 uint_type3		R
0x1030	device_1 display_value4(H)		R
0x1031	device_1 display_value4(L)		R
0x1032	device_1 uint_type4		R
0x1033	device_1 system_status_error[0]		R
0x1034	device_1 system_status_error[1]		R
0x1035	device_1 system_status_error[2]		R
0x1036	device_1 system_status_error[3]		R
0x1037	device_1 system_status_alarm[0]		R
0x1038	device_1 system_status_alarm[1]		R
0x1039	device_1 system_status_alarm[2]		R
0x103A	device_1 system_status_alarm[3]		R
0x103B	device_1 DDF		R
0x103C	device_1 Starting position of ready only area		R
0x103D	device_1 Length of read only area		R
0x103E	device_1 Starting position of read/ write area		R
0x103F	device_1 Length of read/ write area		R

DEVICE_2(AUTO ID)

0x1040	device_2 Company Code 1	'FI'	R
0x1041	device_2 Company Code 2	'NE'	R
0x1042	device_2 Company Code 3	'-T'	R
0x1043	device_2 Company Code 4	'EK'	R
0x1044	device_2 Product Type		R
0x1045	device_2 Product No		R
0x1046	device_2 Product Version		R
0x1047	device_2 display_value1(H)		R
0x1048	device_2 display_value1(L)		R
0x1049	device_2 uint_type1		R
0x104A	device_2 display_value2(H)		R
0x104B	device_2 display_value2(L)		R
0x104C	device_2 uint_type2		R
0x104D	device_2 display_value3(H)		R
0x104E	device_2 display_value3(L)		R
0x104F	device_2 uint_type3		R
0x1050	device_2 display_value4(H)		R
0x1051	device_2 display_value4(L)		R
0x1052	device_2 uint_type4		R
0x1053	device_2 system_status_error[0]		R
0x1054	device_2 system_status_error[1]		R
0x1055	device_2 system_status_error[2]		R
0x1056	device_2 system_status_error[3]		R
0x1057	device_2 system_status_alarm[0]		R
0x1058	device_2 system_status_alarm[1]		R
0x1059	device_2 system_status_alarm[2]		R
0x105A	device_2 system_status_alarm[3]		R
0x105B	device_2 DDF		R
0x105C	device_2 Starting position of ready only area		R
0x105D	device_2 Length of read only area		R
0x105E	device_2 Starting position of read/ write area		R
0x105F	device_2 Length of read/ write area		R



The table shows addresses for 10 sensors only. For more addresses for more sensors, please keep calculating in sequence.

DEVICE_3(AUTO ID)

DEVICE_4(AUTO ID)

	= \ /					<u>, ,</u>		
0x1060	device_3 Company Code 1	'FI'	R	4225	0x1080	device_4 Company Code 1	'FI'	R
0x1061	device_3 Company Code 2	'NE'	R	4226	0x1081	device_4 Company Code 2	'NE'	R
0x1062	device_3 Company Code 3	'-T'	R	4227	0x1082	device_4 Company Code 3	'-T'	R
0x1063	device_3 Company Code 4	'EK'	R	4228	0x1083	device_4 Company Code 4	'EK'	R
0x1064	device_3 Product Type		R	4229	0x1084	device_4 Product Type		R
0x1065	device_3 Product No		R	4230	0x1085	device_4 Product No		R
0x1066	device_3 Product Version		R	4231	0x1086	device_4 Product Version		R
0x1067	device_3 display_value1(H)		R	4232	0x1087	device_4 display_value1(H)		R
0x1068	device_3 display_value1(L)		R	4233	0x1088	device_4 display_value1(L)		R
0x1069	device_3 uint_type1		R	4234	0x1089	device_4 uint_type1		R
0x106A	device_3 display_value2(H)		R	4235	0x108A	device_4 display_value2(H)		R
0x106B	device_3 display_value2(L))		R	4236	0x108B	device_4 display_value2(L)		R
0x106C	device_3 uint_type2		R	4237	0x108C	device_4 uint_type2		R
0x106D	device_3 display_value3(H)		R	4238	0x108D	device_4 display_value3(H)		R
0x106E	device_3 display_value3(L)		R	4239	0x108E	device_4 display_value3(L)		R
0x106F	device_3 uint_type3		R	4240	0x108F	device_4 uint_type3		R
0x1070	device_3 display_value4(H)		R	4241	0x1090	device_4 display_value4(L)		R
0x1071	device_3 display_value4(L)		R	4242	0x1091	device_4 display_value4(L)		R
0x1072	device_3 uint_type4		R	4243	0x1092	device_4 uint_type4		R
0x1073	device_3 system_status_error[0]		R	4244	0x1093	device_4 system_status_error[0]		R
0x1074	device_3 system_status_error[1]		R	4245	0x1094	device_4 system_status_error[1]		R
0x1075	device_3 system_status_error[2]		R	4246	0x1095	device_4 system_status_error[2]		R
0x1076	device_3 system_status_error[3]		R	4247	0x1096	device_4 system_status_error[3]		R
0x1077	device_3 system_status_alarm[0]		R	4248	0x1097	device_4 system_status_alarm[0]		R
0x1078	device_3 system_status_alarm[1]		R	4249	0x1098	device_4 system_status_alarm[1]		R
0x1079	device_3 system_status_alarm[2]		R	4250	0x1099	device_4 system_status_alarm[2]		R
0x107A	device_3 system_status_alarm[3]		R	4251	0x109A	device_4 system_status_alarm[3]		R
0x107B	device_3 DDF		R	4252	0x109B	device_4 DDF		R
0x107C	device_3 Starting position of ready only area		R	4253	0x109C	device_4 Starting position of ready only area		R
0x107D	device_3 Length of read only area		R	4254	0x109D	device_4 Length of read only area		R
0x107E	device_3 Starting position of read/ write area		R	4255	0x109E	device_4 Starting position of read/ write area		R
0x107F	device_3 Length of read/ write area		R	4256	0x109F	device_4 Length of read/ write area		R



The table shows addresses for 10 sensors only. For more addresses for more sensors, please keep calculating in sequence.

DEVICE_5(AUTO ID)

0x1100device_5 Company Code 1'FI'R0x1101device_5 Company Code 2'I'NE'R0x1102device_5 Company Code 3'I'ICR0x1103device_5 Company Code 4'I'EK'R0x1104device_5 Product TypeIIIIR0x1105device_5 Product VersionIIIIIR0x1106device_5 display_value1(H)IIIIIR0x1107device_5 display_value2(H)IIIRR0x1108device_5 display_value2(H)IIIRR0x1104device_5 display_value3(H)IIIRR0x1105device_5 display_value3(H)IIIRR0x1106device_5 display_value4(H)IIIRR0x1107device_5 display_value4(L)IIIRR0x1110device_5 display_value4(L)IIIRR0x1111device_5 system_status_error[0]IIIRR0x1111device_5 system_status_error[1]IIIRR0x1111device_5 system_status_alarm[0]IIIRR0x1111device_5 system_status_alarm[1]IIIRR0x1111device_5 system_status_alarm[2]IIIIIIIR0x1111device_5 System_status_alarm[2]IIIIIIIR0x1111device_5 system_status_alarm[3]IIIIIIIIIR0x11111device_5 system_status_alarm[3]IIIIIIIIIIII <td< th=""><th></th><th></th><th></th><th>_</th></td<>				_
0x1101device_5 Company Code 2'NE'R0x1102device_5 Company Code 3'I'IR0x1103device_5 Company Code 4'I'IR0x1104device_5 Product TypeIIIIR0x1105device_5 Product VersionIIIIR0x1107device_5 display_value1(H)IIIIR0x1108device_5 display_value2(H)IIIIR0x1104device_5 display_value2(H)IIIIR0x1104device_5 display_value2(H)IIIIR0x1105device_5 display_value3(L)IIRR0x1106device_5 display_value3(L)IIRR0x1107device_5 display_value4(H)IIRR0x1108device_5 display_value4(L)IIRR0x1110device_5 display_value4(L)IIRR0x1111device_5 system_status_error[0]IIRR0x1111device_5 system_status_error[1]IIRR0x1111device_5 system_status_alarm[0]IIRR0x1111device_5 system_status_alarm[1]IIRR0x1111device_5 system_status_alarm[2]IIIIR0x1111device_5 system_status_alarm[3]IIIIR0x1111device_5 system_status_alarm[3]IIIIR0x11111device_5 system_status_alarm[3]IIIIII0x11111devi	0x1100	device_5 Company Code 1	'FI'	R
0x1102device_5 Company Code 3·· TR0x1103device_5 Company Code 4·· KR0x1104device_5 Product Type·· KR0x1105device_5 Product No·· KR0x1106device_5 Product Version·· KR0x1107device_5 display_value1(H)·· KR0x1108device_5 display_value2(H)·· KR0x1104device_5 display_value2(H)·· KR0x1105device_5 display_value2(L)·· KR0x1106device_5 display_value3(H)·· KR0x1107device_5 display_value3(H)·· KR0x1108device_5 display_value4(H)·· KR0x1101device_5 display_value4(H)·· KR0x1111device_5 system_status_error[0]·· KR0x1112device_5 system_status_error[1]·· KR0x1114device_5 system_status_alarm[2]·· KR0x1115device_5 system_status_alarm[1]·· KR0x1116device_5 system_status_alarm[3]·· KR0x1117device_5 system_status_alarm[3]·· KR0x1111device_5 system_status_alarm[3]·· KR0x1112device_5 system_status_alarm[3]·· KR0x1113device_5 system_status_alarm[3]·· KR0x1114device_5 system_status_alarm[3]·· KR0x1116device_5 system_status_alarm[3]·· KR0x1117device_5 sys	0x1101	device_5 Company Code 2	'NE'	R
0x1103device_5 Company Code 4Image: Feasible Feasi	0x1102	device_5 Company Code 3	'-T'	R
0x1104device_5 Product TypeIR0x1105device_5 Product NoIR0x1106device_5 Product VersionIR0x1107device_5 display_value1(H)IR0x1108device_5 display_value1(L)IR0x1109device_5 display_value2(H)IR0x1104device_5 display_value2(L)IR0x1105device_5 display_value2(L)IR0x1106device_5 display_value3(H)IR0x1107device_5 display_value3(L)IR0x1108device_5 display_value4(L)IR0x1110device_5 display_value4(L)IR0x1111device_5 system_status_error[0]IR0x1112device_5 system_status_error[1]IR0x1114device_5 system_status_error[2]IR0x1115device_5 system_status_alarm[0]IR0x1114device_5 system_status_alarm[1]IR0x1114device_5 system_status_alarm[3]IR0x1114device_5 system_status_alarm[3]IR0x1114device_5 system_status_alarm[3]IR0x1114device_5 system_status_alarm[3]IR0x1115device_5 System_status_alarm[3]IR0x1116device_5 System_status_alarm[3]IR0x1117device_5 System_status_alarm[3]IR0x1118device_5 System_status_alarm[3]IR0x11	0x1103	device_5 Company Code 4	'EK'	R
0x1105device_5 Product NoIR0x1106device_5 Product VersionIR0x1107device_5 display_value1(H)IR0x1108device_5 display_value1(L)IR0x1109device_5 display_value2(H)IR0x1104device_5 display_value2(L)IR0x1105device_5 display_value2(L)IR0x1106device_5 display_value3(H)IR0x1107device_5 display_value3(L)IR0x1108device_5 display_value4(H)IR0x1104device_5 display_value4(H)IR0x1110device_5 system_status_error[0]IR0x1111device_5 system_status_error[1]IR0x1114device_5 system_status_error[2]IR0x1115device_5 system_status_alarm[1]IR0x1116device_5 system_status_alarm[2]IR0x1117device_5 system_status_alarm[3]IR0x1118device_5 system_status_alarm[3]IR0x1114device_5 system_status_alarm[3]IR0x1114device_5 system_status_alarm[3]IR0x1118device_5 system_status_alarm[3]IR0x1114device_5 system_status_alarm[3]IR0x1115device_5 System_status_alarm[3]IR0x1116device_5 system_status_alarm[3]IR0x1119device_5 System_status_alarm[3]IR <t< td=""><td>0x1104</td><td>device_5 Product Type</td><td></td><td>R</td></t<>	0x1104	device_5 Product Type		R
0x1106device_5 Product VersionImage: style s	0x1105	device_5 Product No		R
0x1107device_5 display_value1(H)IIR0x1108device_5 display_value1(L)IIR0x1109device_5 display_value2(H)IIR0x1104device_5 display_value2(L)IIR0x1105device_5 display_value2(L)IIR0x1100device_5 display_value3(H)IIR0x1101device_5 display_value3(L)IRR0x1102device_5 display_value4(L)IIR0x1111device_5 display_value4(L)IRR0x1112device_5 system_status_error[0]IRR0x1114device_5 system_status_error[1]IRR0x1116device_5 system_status_error[2]IRR0x1111device_5 system_status_error[3]IRR0x1112device_5 system_status_error[3]IRR0x1114device_5 system_status_error[3]IRR0x1115device_5 system_status_alarm[0]IRR0x1116device_5 system_status_alarm[3]IRR0x1118device_5 System_status_alarm[3]IRR0x1114device_5 System_status_alarm[3]IRR0x1114device_5 System_status_alarm[3]IRR0x1114device_5 System_status_alarm[3]IRR0x1114device_5 System_status_alarm[3]IRR0x1114<	0x1106	device_5 Product Version		R
0x1108device_5 display_value1(L)IIR0x1109device_5 uint_type1IR0x1104device_5 display_value2(H)IR0x1105device_5 display_value2(L)IR0x1100device_5 display_value3(H)IR0x1101device_5 display_value3(L)IR0x1102device_5 display_value3(L)IR0x1101device_5 display_value4(H)IR0x1111device_5 display_value4(L)IR0x1112device_5 system_status_error[0]IR0x1113device_5 system_status_error[1]IR0x1114device_5 system_status_error[3]IR0x1115device_5 system_status_alarm[0]IR0x1114device_5 system_status_alarm[1]IR0x1114device_5 system_status_alarm[2]IR0x1115device_5 system_status_alarm[3]IR0x1114device_5 system_status_alarm[3]IR0x1114device_5 System_status_alarm[3]IR0x1114device_5 System_status_alarm[3]IR0x1114device_5 System_status_alarm[3]IR0x1114device_5 System_status_alarm[3]IR0x1114device_5 System_status_alarm[3]IR0x1114device_5 System_status_alarm[3]IR0x1114device_5 System_status_alarm[3]IR0x11114device_5 System_status_alarm[3]	0x1107	device_5 display_value1(H)		R
0x1109device_5 uint_type1IIR0x1104device_5 display_value2(H)IR0x1105device_5 display_value2(L)IR0x1100device_5 uint_type2IR0x1100device_5 display_value3(H)IR0x1101device_5 display_value3(L)IR0x1102device_5 display_value4(H)IR0x1111device_5 display_value4(L)IR0x1112device_5 uint_type4IR0x1113device_5 system_status_error[0]IR0x1114device_5 system_status_error[2]IR0x1115device_5 system_status_error[3]IR0x1114device_5 system_status_alarm[0]IR0x1114device_5 system_status_alarm[1]IR0x1114device_5 system_status_alarm[2]IR0x1114device_5 system_status_alarm[3]IR0x1114device_5 system_status_alarm[3]IR0x1115device_5 System_status_alarm[3]IR0x1114device_5 System_status_alarm[3]IR0x1115device_5 System_status_alarm[3]IR0x1114device_5 System_status_alarm[3]IR0x1115device_5 System_status_alarm[3]IR0x1116device_5 System_status_alarm[3]IR0x1116device_5 System_status_alarm[3]IR0x1116device_5 System_status_alarm[3]IR <td>0x1108</td> <td>device_5 display_value1(L)</td> <td></td> <td>R</td>	0x1108	device_5 display_value1(L)		R
0x110Adevice_5 display_value2(H)IR0x110Bdevice_5 display_value2(L)IR0x110Cdevice_5 uint_type2IR0x110Ddevice_5 display_value3(H)IR0x110Edevice_5 display_value3(L)IR0x110Fdevice_5 display_value4(H)IR0x1111device_5 display_value4(H)IR0x1112device_5 uint_type4IR0x1113device_5 system_status_error[0]IR0x1114device_5 system_status_error[1]IR0x1115device_5 system_status_error[3]IR0x1116device_5 system_status_alarm[0]IR0x1118device_5 system_status_alarm[1]IR0x1114device_5 system_status_alarm[2]IR0x1114device_5 system_status_alarm[3]IR0x1114device_5 system_status_alarm[3]IR0x1115device_5 system_status_alarm[3]IR0x1114device_5 system_status_alarm[3]IR0x1114device_5 system_status_alarm[3]IR0x1114device_5 system_status_alarm[3]IR0x1115device_5 Starting position of ready onlyIR0x1116device_5 Starting position of ready onlyIR0x1115device_5 Starting position of ready writeIR0x1116device_5 Starting position of ready writeIR0x1115device_5 Length	0x1109	device_5 uint_type1		R
0x110Bdevice_5 display_value2(L)Image: Constraint of the section of the secti	0x110A	device_5 display_value2(H)		R
0x110Cdevice_5 uint_type2Image: Constraint of the system status_alarm[0]Image: Constraint of the sy	0x110B	device_5 display_value2(L)		R
0x110Ddevice_5 display_value3(H)Image: Marcol Amage:	0x110C	device_5 uint_type2		R
0x110Edevice_5 display_value3(L)R0x110Fdevice_5 uint_type3R0x1100device_5 display_value4(H)R0x1111device_5 display_value4(L)R0x1112device_5 uint_type4R0x1113device_5 system_status_error[0]R0x1114device_5 system_status_error[1]R0x1115device_5 system_status_error[2]R0x1116device_5 system_status_error[3]R0x1118device_5 system_status_alarm[0]R0x1118device_5 system_status_alarm[2]R0x1114device_5 system_status_alarm[3]R0x1118device_5 System_status_alarm[3]R0x1114device_5 System_status_alarm[3]R0x1115device_5 System_status_alarm[3]R0x1114device_5 System_status_alarm[3]R0x1115device_5 System_status_alarm[3]R0x1114device_5 System_status_alarm[3]R0x1115device_5 Starting position of ready only areaR0x1111device_5 Starting position of read/ writeR0x11115device_5 Starting position of read/ writeR0x1115device_5 Length of read/ write areaR0x1117device_5 Length of read/ write areaR	0x110D	device_5 display_value3(H)		R
0x110Fdevice_5 uint_type3Image: Rest of the system status and the system sta	0x110E	device_5 display_value3(L)		R
0x1110device_5 display_value4(H)Image: Mark transform: Mark	0x110F	device_5 uint_type3		R
0x1111device_5 display_value4(L)Image: Rest of the system_status_error[0]Rest of the system_status_error[0]Rest of the system_status_error[0]Rest of the system_status_error[0]Rest of the system_status_error[1]Rest of the system_status_error[2]Rest of the system_status_error[2]Rest of the system_status_error[3]Rest of the system_status_error[3] <td>0x1110</td> <td>device_5 display_value4(H)</td> <td></td> <td>R</td>	0x1110	device_5 display_value4(H)		R
0x1112device_5 uint_type4R0x1113device_5 system_status_error[0]R0x1114device_5 system_status_error[1]R0x1115device_5 system_status_error[2]R0x1116device_5 system_status_error[3]R0x1117device_5 system_status_error[3]R0x1118device_5 system_status_alarm[0]R0x1119device_5 system_status_alarm[1]R0x1114device_5 system_status_alarm[2]R0x1118device_5 system_status_alarm[3]R0x1111device_5 DDFR0x1111device_5 Length of read only areaR0x1112device_5 Starting position of read/ write areaR0x1114device_5 Length of read/ write areaR	0x1111	device_5 display_value4(L)		R
0x1113device_5 system_status_error[0]R0x1114device_5 system_status_error[1]R0x1115device_5 system_status_error[2]R0x1116device_5 system_status_error[3]R0x1117device_5 system_status_alarm[0]R0x1118device_5 system_status_alarm[1]R0x1119device_5 system_status_alarm[2]R0x1114device_5 system_status_alarm[3]R0x1115device_5 system_status_alarm[3]R0x1114device_5 DDFR0x1110device_5 Length of read only areaR0x1111device_5 Starting position of read/ writeR0x1112device_5 Length of read/ write areaR	0x1112	device_5 uint_type4		R
0x1114device_5 system_status_error[1]R0x1115device_5 system_status_error[2]R0x1116device_5 system_status_error[3]R0x1117device_5 system_status_alarm[0]R0x1118device_5 system_status_alarm[1]R0x1119device_5 system_status_alarm[2]R0x1114device_5 system_status_alarm[3]R0x1115device_5 system_status_alarm[3]R0x1114device_5 DDFR0x1110device_5 Starting position of ready only areaR0x1111device_5 Length of read only areaR0x1112device_5 Starting position of read/ write areaR0x1111device_5 Length of read/ write areaR	0x1113	device_5 system_status_error[0]		R
0x1115device_5 system_status_error[2]R0x1116device_5 system_status_error[3]R0x1117device_5 system_status_alarm[0]R0x1118device_5 system_status_alarm[1]R0x1119device_5 system_status_alarm[2]R0x1114device_5 system_status_alarm[3]R0x1118device_5 system_status_alarm[3]R0x1114device_5 DDFR0x1110device_5 Starting position of ready only areaR0x1111device_5 Length of read only areaR0x1112device_5 Starting position of read/ write areaR0x1111device_5 Length of read/ write areaR	0x1114	device_5 system_status_error[1]		R
0x1116device_5 system_status_error[3]R0x1117device_5 system_status_alarm[0]R0x1118device_5 system_status_alarm[1]R0x1119device_5 system_status_alarm[2]R0x1114device_5 system_status_alarm[2]R0x1118device_5 system_status_alarm[3]R0x1118device_5 DDFR0x1110device_5 Starting position of ready only areaR0x1111device_5 Length of read only areaR0x1111device_5 Starting position of read/ write areaR0x1111device_5 Starting position of read/ write areaR	0x1115	device_5 system_status_error[2]		R
0x1117device_5 system_status_alarm[0]R0x1118device_5 system_status_alarm[1]R0x1119device_5 system_status_alarm[2]R0x1114device_5 system_status_alarm[3]R0x1118device_5 DDFR0x111Cdevice_5 Starting position of ready only areaR0x111Ddevice_5 Length of read only areaR0x111Edevice_5 Starting position of read/ write areaR0x1111device_5 Length of read/ write areaR	0x1116	device_5 system_status_error[3]		R
0x1118device_5 system_status_alarm[1]R0x1119device_5 system_status_alarm[2]R0x1114device_5 system_status_alarm[3]R0x111Adevice_5 DDFR0x111Cdevice_5 Starting position of ready only areaR0x111Ddevice_5 Length of read only areaR0x111Edevice_5 Starting position of read/ write areaR0x111Edevice_5 Length of read/ write areaR	0x1117	device_5 system_status_alarm[0]		R
0x1119device_5 system_status_alarm[2]R0x111Adevice_5 system_status_alarm[3]R0x111Adevice_5 DDFR0x111Cdevice_5 Starting position of ready only areaR0x111Ddevice_5 Length of read only areaR0x111Edevice_5 Starting position of read/ write areaR0x111Bdevice_5 Length of read only areaR0x111Edevice_5 Starting position of read/ write areaR0x111Edevice_5 Length of read/ write areaR	0x1118	device_5 system_status_alarm[1]		R
0x111Adevice_5 system_status_alarm[3]R0x111Bdevice_5 DDFR0x111Cdevice_5 Starting position of ready only areaR0x111Ddevice_5 Length of read only areaR0x111Edevice_5 Starting position of read/ write areaR0x111Fdevice_5 Length of read/ write areaR	0x1119	device_5 system_status_alarm[2]		R
0x111Bdevice_5 DDFR0x111Cdevice_5 Starting position of ready only areaR0x111Ddevice_5 Length of read only areaR0x111Edevice_5 Starting position of read/ write areaR0x111Fdevice_5 Length of read/ write areaR	0x111A	device_5 system_status_alarm[3]		R
0x111Cdevice_5 Starting position of ready only areaR0x111Ddevice_5 Length of read only areaR0x111Edevice_5 Starting position of read/ write areaR0x111Fdevice_5 Length of read/ write areaR	0x111B	device_5 DDF		R
0x111D device_5 Length of read only area R 0x111E device_5 Starting position of read/ write area R 0x111F device_5 Length of read/ write area R	0x111C	device_5 Starting position of ready only area		R
0x111E device_5 Starting position of read/ write area R 0x111F device_5 Length of read/ write area R	0x111D	device_5 Length of read only area		R
0x111F device_5 Length of read/ write area R	0x111E	device_5 Starting position of read/ write area		R
	0x111F	device_5 Length of read/ write area		R

DEVICE_6(AUTO ID)

0x1120	device_6 Company Code 1	'FI'	R
0x1121	device_6 Company Code 2	'NE'	R
0x1122	device_6 Company Code 3	'-T'	R
0x1123	device_6 Company Code 4	'EK'	R
0x1124	device_6 Product Type		R
0x1125	device_6 Product No		R
0x1126	device_6 Product Version		R
0x1127	device_6 display_value1(H)		R
0x1128	device_6 display_value1(L)		R
0x1129	device_6 uint_type1		R
0x112A	device_6 display_value2(H)		R
0x112B	device_6 display_value2(L)		R
0x112C	device_6 uint_type2		R
0x112D	device_6 display_value3(H)		R
0x112E	device_6 display_value3(L)		R
0x112F	device_6 uint_type3		R
0x1130	device_6 display_value4(H)		R
0x1131	device_6 display_value4(L)		R
0x1132	device_6 uint_type4		R
0x1133	device_6 system_status_error[0]		R
0x1134	device_6 system_status_error[1]		R
0x1135	device_6 system_status_error[2]		R
0x1136	device_6 system_status_error[3]		R
0x1137	device_6 system_status_alarm[0]		R
0x1138	device_6 system_status_alarm[1]		R
0x1139	device_6 system_status_alarm[2]		R
0x113A	device_6 system_status_alarm[3]		R
0x113B	device_6 DDF		R
0x113C	device_6 Starting position of ready only area		R
0x113D	device_6 Length of read only area		R
0x113E	device_6 Starting position of read/ write area		R
0x113F	device 6 Length of read/ write area		R



The table shows addresses for 10 sensors only. For more addresses for more sensors, please keep calculating in sequence.

DEVICE_7(AUTO ID)

	, <i>,</i>		1
0x1140	device_7 Company Code 1	'FI'	R
0x1141	device_7 Company Code 2	'NE'	R
0x1142	device_7 Company Code 3	'-T'	R
0x1143	device_7 Company Code 4	'EK'	R
0x1144	device_7 Product Type		R
0x1145	device_7 Product No		R
0x1146	device_7 Product Version		R
0x1147	device_7 display_value1(H)		R
0x1148	device_7 display_value1(L)		R
0x1149	device_7 uint_type1		R
0x114A	device_7 display_value2(H)		R
0x114B	device_7 display_value2(L)		R
0x114C	device_7 uint_type2		R
0x114D	device_7 display_value3(H)		R
0x114E	device_7 display_value3(L)		R
0x114F	device_7 uint_type3		R
0x1150	device_7 display_value4(H)		R
0x1151	device_7 display_value4(L)		R
0x1152	device_7 uint_type4		R
0x1153	device_7 system_status_error[0]		R
0x1154	device_7 system_status_error[1]		R
0x1155	device_7 system_status_error[2]		R
0x1156	device_7 system_status_error[3]		R
0x1157	device_7 system_status_alarm[0]		R
0x1158	device_7 system_status_alarm[1]		R
0x1159	device_7 system_status_alarm[2]		R
0x115A	device_7 system_status_alarm[3]		R
0x115B	device_7 DDF		R
0x115C	device_7 Starting position of ready only area		R
0x115D	device_7 Length of read only area		R
0x115E	device_7 Starting position of read/ write area		R
0x115F	device_7 Length of read/ write area		R

DEVICE_8(AUTO ID)

	· ·		
0x1160	device_8 Company Code 1	'FI'	R
0x1161	device_8 Company Code 2	'NE'	R
0x1162	device_8 Company Code 3	'-T'	R
0x1163	device_8 Company Code 4	'EK'	R
0x1164	device_8 Product Type		R
0x1165	device_8 Product No		R
0x1166	device_8 Product Version		R
0x1167	device_8 display_value1(H)		R
0x1168	device_8 display_value1(L)		R
0x1169	device_8 uint_type1		R
0x116A	device_8 display_value2(H)		R
0x116B	device_8 display_value2(L)		R
0x116C	device_8 uint_type2		R
0x116D	device_8 display_value3(H)		R
0x116E	device_8 display_value3(L)		R
0x116F	device_8 uint_type3		R
0x1170	device_8 display_value4(H)		R
0x1171	device_8 display_value4(L)		R
0x1172	device_8 uint_type4		R
0x1173	device_8 system_status_error[0]		R
0x1174	device_8 system_status_error[1]		R
0x1175	device_8 system_status_error[2]		R
0x1176	device_8 system_status_error[3]		R
0x1177	device_8 system_status_alarm[0]		R
0x1178	device_8 system_status_alarm[1]		R
0x1179	device_8 system_status_alarm[2]		R
0x117A	device_8 system_status_alarm[3]		R
0x117B	device_8 DDF		R
0x117C	device_8 Starting position of ready only area		R
0x117D	device_8 Length of read only area		R
0x117E	device_8 Starting position of read/ write area		R
0x117F	device_8 Length of read/ write area		R



The table shows addresses for 10 sensors only. For more addresses for more sensors, please keep calculating in sequence.

DEVICE_9(AUTO ID)

0x1180	device_9 Company Code 1	'FI'	R
0x1181	device_9 Company Code 2	'NE'	R
0x1182	device_9 Company Code 3	'-T'	R
0x1183	device_9 Company Code 4	'EK'	R
0x1184	device_9 Product Type		R
0x1185	device_9 Product No		R
0x1186	device_9 Product Version		R
0x1187	device_9 display_value1(H)		R
0x1188	device_9 display_value1(L)		R
0x1189	device_9 uint_type1		R
0x118A	device_9 display_value2(H)		R
0x118B	device_9 display_value2(L)		R
0x118C	device_9 uint_type2		R
0x118D	device_9 display_value3(H)		R
0x118E	device_9 display_value3(L)		R
0x118F	device_9 uint_type3		R
0x1190	device_9 display_value4(H)		R
0x1191	device_9 display_value4(L)		R
0x1192	device_9 uint_type4		R
0x1193	device_9 system_status_error[0]		R
0x1194	device_9 system_status_error[1]		R
0x1195	device_9 system_status_error[2]		R
0x1196	device_9 system_status_error[3]		R
0x1197	device_9 system_status_alarm[0]		R
0x1198	device_9 system_status_alarm[1]		R
0x1199	device_9 system_status_alarm[2]		R
0x119A	device_9 system_status_alarm[3]		R
0x119B	device_9 DDF		R
0x119C	device_9 Starting position of ready only area		R
0x119D	device_9 Length of read only area		R
0x119E	device_9 Starting position of read/ write area		R
0x119F	device_9 Length of read/ write area		R

DEVICE_10(AUTO ID)

0x1200	device_10 Company Code 1	'FI'	R
0x1201	device_10 Company Code 2	'NE'	R
0x1202	device_10 Company Code 3	'-T'	R
0x1203	device_10 Company Code 4	'EK'	R
0x1204	device_10 Product Type		R
0x1205	device_10 Product No		R
0x1206	device_10 Product Version		R
0x1207	device_10 display_value1(H)		R
0x1208	device_10 display_value1(L)		R
0x1209	device_10 uint_type1		R
0x120A	device_10 display_value2(H)		R
0x120B	device_10 display_value2(L)		R
0x120C	device_10 uint_type2		R
0x120D	device_10 display_value3(H)		R
0x120E	device_10 display_value3(L)		R
0x120F	device_10 uint_type3		R
0x1210	device_10 display_value4(H)		R
0x1211	device_10 display_value4(L)		R
0x1212	device_10 uint_type4		R
0x1213	device_10 system_status_error[0]		R
0x1214	device_10 system_status_error[1]		R
0x1215	device_10 system_status_error[2]		R
0x1216	device_10 system_status_error[3]		R
0x1217	device_10 system_status_alarm[0]		R
0x1218	device_10 system_status_alarm[1]		R
0x1219	device_10 system_status_alarm[2]		R
0x121A	device_10 system_status_alarm[3]		R
0x121B	device_10 DDF		R
0x121C	device_10 Starting position of ready only area		R
0x121D	device_10 Length of read only area		R
0x121E	device_10 Starting position of read/ write area		R
0x121F	device_10 Length of read/ write area		R



The table shows addresses for 10 sensors only. For more addresses for more sensors, please keep calculating in sequence.

7.8 RCU Connection Diagram



7.9 How to Set Up



7.9.1 Precautions :

- If a new sensor is added to the network, the RCU must re-scan all connected devices and re-create a new network. The existing ROI parameter settings will also be cleared.
- The default number of devices that RCU will scan is 128 units. If the actual number of connections of IDs is not 128, please change the setting for number of scans to the appropriate number. For example, if there are 20 connecting sensors with maximum 32 IDs, set the number of scans to 32. This will greatly shorten the length of time spent scanning.)
- The default BaudRate for communication between the RCU and sensor is 38400. It is recommended to leave the BaudRate at 38400. If the BaudRate is too low, it will reduce sensitivity and decrease the frequency of screen updates.

7.9.2 Instruction:

Examples:

- The RCU is connected to 20 units of EE310 sensors, BaudRate is 57600, ID is at 1~10 and 21~30.
- 2. The user only needs to set or operate the EE310 with ID5~10, ID21~23, ID26~30.
- 3. Transfer all data received from the connected EE310 to the PC (ID is 1, BaudRate 9600)



Back to the main page and proceed with the following steps:





Back to the main page and proceed with the following steps:



Operate the Modbus Poll at the PC for connection.

See 7.1 for further ModBus address table

8. Maintenance



8.1 Daily Maintenance

8.1.1 A regular check on the structure is necessary.



Make sure each component is firmly fixed, especially when the RCU is used in humid, dusty facilities.

9. Troubleshoot

Trouble	Possible Failure Cause	Inspection	Solution
	Wiring failure or no power supply	No power measured at the power supply	Wiring check and power recovery
No display and lights	Shortcut or overload occurred while installing	Blown fuse in the PCB	Fuse replacement
	Power Supply Failure	Secondary Power Supply Failure 24VDC	Check the wiring, replace the power supply, or contact our company.
	No sensor connected	RS-485 wiring or module unconnected	Connecting the wiring or the module
	No power input on the sensor	Check if the sensor is sending power.	Power input on
Displaying 00000	No automatic refresh	Displaying 00000 in the main page; ID=000	Hardware refresh
	Communication module failure	Unable to connect to sensor	Contact FineTek Co., Ltd.
	Wrong Interface settings	Check on consistency (RS-485 for RS-485)	Ensuing the setup same as it is being used
	Sensor ID change or Sensor ID repeat	Abnormal connection on the sensor ID	Refresh hardware when all ID differs
Connection failure with some sensors	Electrical failure at the sensor end		Contact FineTek Co., Ltd.
in the network	Loose connection of RS-485 wiring at the sensor end	Check on RS-485 wiring	Check the connection until recovery
Abnormal flashing or	Connection error or break at the sensor end	"Disconnect" displayed when the RCU scans the sensor ID	Check the sensor's wiring
un-illumination of LED indicators	Blown LED lights	RCU shows that the Sensor's value is not 0000 but the LED does not light up.	Contact FineTek Co., Ltd.