

# WISE-580x-MTCP Modbus TCP Master

## Application Example



- **Scenario :**

WISE-5801-MTCP provides Modbus TCP Master function to connect to the I/O modules that support Modbus TCP slave function. The connection interface between WISE and I/O modules is based on the Ethernet environment; it will simplify the wiring of the automation control system.

In this application for disaster prevention and access control of the factory environment, WISE-5801-MTCP is connected to ET-7018Z and PET-7060. The ET-7018Z is used to detect the temperature for various devices in the factory in real time; WISE-5801-MTCP can communicate with ET-7018Z via Modbus TCP protocol to receive the real time temperature data for data logger operation, and then send back the real time temperature data and historical data logger files to the control center. By using the WISE-5801-MTCP, the system is able to initiate immediately actions in response to emergencies. For example, when the temperature reaches the pre-set critical temperature threshold, based on the temperature it gets from ET-7018Z, the WISE-5801-MTCP will take actions such as stop the devices automatically, turn on the temperature reduction devices, or send SMS message to notify the related personals. The operator can also send the SMS command to WISE-5801-MTCP to take appropriate actions to the factory devices immediately. These functions help to quickly response to emergencies and enable more efficient real time monitoring of the overall factory operation.

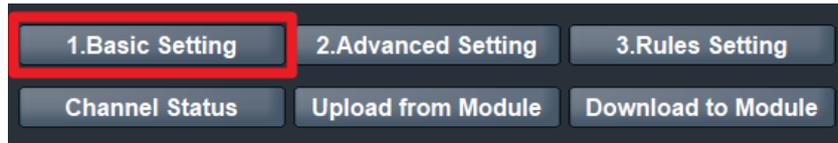
The PET-7060 is used to connect to the access control system and report its status. WISE-5801-MTCP communicates with PET-7060 via Modbus TCP protocol. With the built-in Schedule function of WISE-5801-MTCP, the user can divide the factory operation time into Working time (8:00-18:00) and non-Working time (18:00-08:00 and holidays). If someone breaks in the factory in non-Working time without the access authority, the WISE-5801-MTCP will send SMS message to notify the related personals and the alarm operation will be enabled. During the lunch break (12:00-13:00); users could also set up the Schedule to ring a bell for notification. WISE-5801-MTCP also provides event trigger data log operation. The door status of the access control from PET-7060 can be used as a trigger source to trigger the data log operation. When the file recording operation is completed, WISE-5801-MTCP will also

automatically send back the data logger file to the control center for further analysis.



● **Steps :**

0. To connect WISE-580x-MTCP and Modbus TCP Slave I/O module should set the IP address, port and NetID first. In this case, ET-7018Z IP: 198.168.100.223, Port:502 and NetID:1; PET-7060 IP:192.168.100.224, Port:502 and NetID:1.
1. Open the WISE WEB page, and get into the Basic Setting page.



2. After getting into the Basic Setting page, click “Modbus TCP Module Setting” to get in the setting page.



3. In “Modbus TCP Module Setting Page”, add Modbus TCP Slave modules. First, we add the ET-7018Z modules to the list.
  - i. In the “Module Type field”, select the type of module “ET-7000/PET-7000 Series” and the number “7018Z” from the drop down list.
  - ii. In the “Name” field, input the module name as ET-7018Z.
  - iii. In the “IP Address” field, input the module IP as 192.168.100.223.
  - iv. In the “Port” field, input the module port as 502.
  - v. In the “NetID” field, input the module NetID as 1.
  - vi. In the “Scan Rate” field, input the time interval in seconds. The WISE-580x-MTCP will update the Modbus data from the Modbus TCP Slave module every specified time-interval. Here use default value 5 seconds.
  - vii. The “Polling Timeout” indicates the time interval for WISE-580x-MTCP to send command to the Modbus TCP Slave module and wait for the response. If the Modbus TCP Slave module takes more response time, it might require longer time interval, please modify the setting to most adequate time interval to meet the requirements. The default value 300 milliseconds will be used in this case.

- viii. In the “Connection Timeout” field, input the time interval in seconds. It is the time interval for WISE-580x-MTCP to connect to the Modbus TCP Slave module and wait for the response. The default value 3 seconds will be used in this case.
- ix. In the “Disconnection Retry Interval” field, input the time interval in seconds. It is the time interval to re-connect with the Modbus TCP Slave module when it is unconnected. The default value 5 seconds will be used in this case.

After finish the ET-7018Z settings, click “Add” button, the ET-7018Z will be added to the Modbus TCP Slave module list as bellow. Click the ET-7018Z on the module list and click “Setting” button to get into the “Modbus TCP Module Attribute Setting” page.

**Modbus TCP Module Setting Page**

Module Type	ET-7000 / PET-7000 Series ▾ 7018Z ▾
Name	ET-7018Z
IP Address	192 . 168 . 100 . 223
Port	502 (Range: 1 ~ 65535)
NetID	1 (Range: 1 ~ 247)
Scan Rate	5 second(s) (Range: 0 ~ 65535)
Polling Timeout	500 millisecond(s) (Range: 1 ~ 10000)
Connection Timeout	3 second(s) (Range: 1 ~ 65535)
Disconnection Retry Interval	5 seconds (Range: 3 ~ 65535)

Modbus TCP Module List			
	Index	Address	Name
<input type="checkbox"/>	1	192.168.100.223:502/1	ET-7018Z
<input type="button" value="Setting"/> <input type="button" value="Remove"/> <input type="button" value="Move Up"/> <input type="button" value="Move Down"/>			

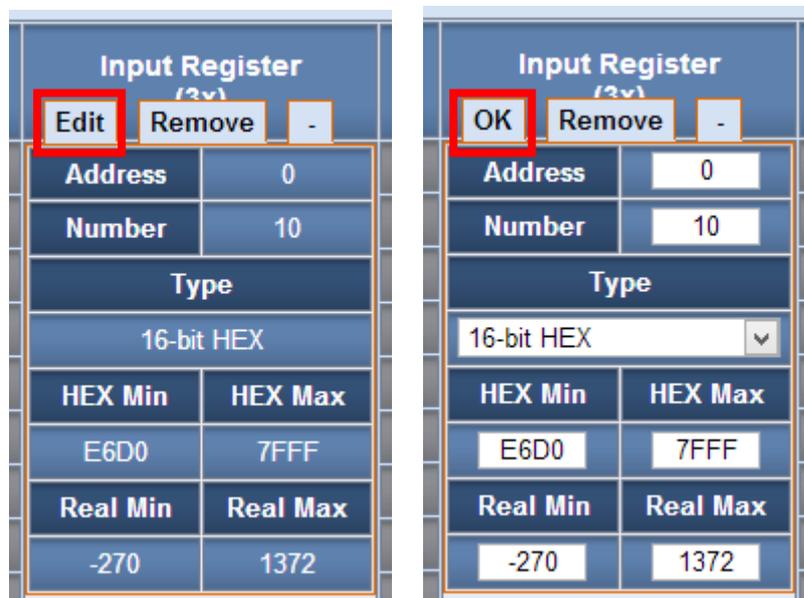
Note: If the connected ET/PET module is equipped with AI/AO channel, please refer to document "[pet\\_et\\_7000\\_register\\_table\\_v1.0.x.pdf](#)" and follow the AI/AO channel type and format table to edit HEX data transformation.

On the “Modbus TCP Module Attribute Setting” page, WISE-580x-MTCP had built the Modbus Address Table according to the channel information of ET-7018Z. Users also can set up another Modbus data(Coil Output、Discrete Input、Input Register & Holding Register) of the remote Modbus TCP module follow the requirement. Please refer to the user manual of the Modbus TCP Slave module for detailed information for each channel type, the corresponding Modbus address, data format, HEX mix, HEX min, Real mix and Real min. Follow the ET-7018Z user manual, the temperature values are saved in Input Register. Users can choose a fit type to use. Type K is selected in this case. According the section “Analog Input Type and Data Format” of the ET-7018Z user manual, we know the HEX Max(7FFF), HEX Min(E6D0), Real Max(1372), Real Min(-270) and data format(16-bit HEX).

Type Code	Input Range	Data Format	+F.S	-F.S
0E	Type J Thermocouple -210 ~ 760°C	Engineering Unit	+7600	-2100
		2's comp HEX	7FFF	E6A0
0F	Type K Thermocouple -270 ~ 1372°C	Engineering Unit	+13720	-2700
		2's comp HEX	7FFF	E6D0
	Type L Linear	Engineering Unit	+40000	-2700

In this case, user just need to set the HEX and Real value of AI channel. Follow the following steps for ET-7018Z data setting.

- i. The mouse move over to “Input Register (3x)”, and click “Edit.”



- ii. In HEX Min field, input “E6D0”.
- iii. In HEX Max field, input “7FFF”.
- iv. In Real Min field, input “-270”.
- v. In Real Max field, input “1372”.

- vi. Click “OK” to save the settings of this Input Register block.
- vii. Make sure all fields are accurate, click “Save” and back to “Modbus TCP Module Setting Page”.

**Modbus TCP Module Attribute Setting**

<b>Name</b>	ET-7018Z
<b>IP Address</b>	192 . 168 . 100 . 223
<b>Port</b>	502 (Range: 1 ~ 65535)
<b>NetID</b>	1 (Range: 1 ~ 247)
<b>Scan Rate</b>	5 second(s) (Range: 0 ~ 65535)
<b>Polling Timeout</b>	500 millisecond(s) (Range: 1 ~ 10000)
<b>Connection Timeout</b>	3 second(s) (Range: 1 ~ 65535)
<b>Disconnection Retry Interval</b>	5 seconds (Range: 3 ~ 65535)

<b>Data Model</b>	Coil Output (0x) <input type="button" value="v"/>
<b>Start Address</b>	0
<b>Continuous Data Number</b>	1
<input type="button" value="Add"/>	

Block Setting
Nickname Setting

WISE-5801 Local Address	Coil Output (0x)	Discrete Input (1x)	Input Register (3x)	Holding Register (4x)
180	Address 0		Address 0	
181	Number 6		Number 10	
182			Type	
183			16-bit HEX	
184			HEX Min HEX Max	
185			E6D0 7FFF	
186			Real Min Real Max	
187			-270 1372	
188				
189				
190				

4. On the “Modbus TCP Module Setting Page”, add ICP DAS Modbus TCP I/O module PET-7060 to the list.

- i. In the “Module Type field”, select the type of module “ET-7000/PET-7000 Series” and the module name “7060” from the drop down list.
- ii. In the “Name” field, input the module name as PET-7060.
- iii. In the “IP Address” field, input the module IP as 192.168.100.224.
- iv. In the “Port” field, input the module port as 502.
- v. In the “NetID” field, input the module NetID as 1.
- vi. In the “Scan Rate” field, use default value 5 seconds
- vii. In the “Polling Timeout” field, use default value 500 milliseconds in this case.
- viii. In the “Connection Timeout” field, use default value 3 seconds in this case.  
In the “Disconnection Retry Interval” field, use default value 5 seconds in this case.

After finish the PET-7060 settings, click “Add” button, the PET-7060 will be added to the Modbus TCP Slave module list as bellow. Click the ET-7060 on the module list and click “Setting” button to get into the “Modbus TCP Module Attribute Setting” page.

### Modbus TCP Module Setting Page

<b>Module Type</b>	ET-7000 / PET-7000 Series <input type="text" value="7060"/>
<b>Name</b>	<input type="text" value="PET-7060"/>
<b>IP Address</b>	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="100"/> . <input type="text" value="224"/>
<b>Port</b>	<input type="text" value="502"/> (Range: 1 ~ 65535)
<b>NetID</b>	<input type="text" value="1"/> (Range: 1 ~ 247)
<b>Scan Rate</b>	<input type="text" value="5"/> second(s) (Range: 0 ~ 65535)
<b>Polling Timeout</b>	<input type="text" value="500"/> millisecond(s) (Range: 1 ~ 10000)
<b>Connection Timeout</b>	<input type="text" value="3"/> second(s) (Range: 1 ~ 65535)
<b>Disconnection Retry Interval</b>	<input type="text" value="5"/> seconds (Range: 3 ~ 65535)
<input type="button" value="Add"/>	

Modbus TCP Module List			
	Index	Address	Name
<input type="radio"/>	1	192.168.100.223:502/1	ET-7018Z
<input checked="" type="radio"/>	2	192.168.100.224:502/1	PET-7060

Note: If the connected ET/PET module is equipped with AI/AO channel, please refer to document "[pet\\_et\\_7000\\_register\\_table\\_v1.0.x.pdf](#)" and follow the AI/AO channel type and format table to edit HEX data transformation.

- On the “Modbus TCP Module Attribute Setting” page, WISE-580x-MTCP had built the Modbus attribute data according to the channel data of module PET-7060. Make sure all fields are accurate, click “Save” and back to “Modbus TCP Module Setting Page.”(In this case, you don't have to do any other setting.)

**Modbus TCP Module Attribute Setting**

<b>Name</b>	PET-7060
<b>IP Address</b>	192 . 168 . 100 . 224
<b>Port</b>	502 (Range: 1 ~ 65535)
<b>NetID</b>	1 (Range: 1 ~ 247)
<b>Scan Rate</b>	5 second(s) (Range: 0 ~ 65535)
<b>Polling Timeout</b>	500 millisecond(s) (Range: 1 ~ 10000)
<b>Connection Timeout</b>	3 second(s) (Range: 1 ~ 65535)
<b>Disconnection Retry Interval</b>	5 seconds (Range: 3 ~ 65535)

<b>Data Model</b>	Coil Output (0x) ▼
<b>Start Address</b>	0
<b>Continuous Data Number</b>	1
Add	

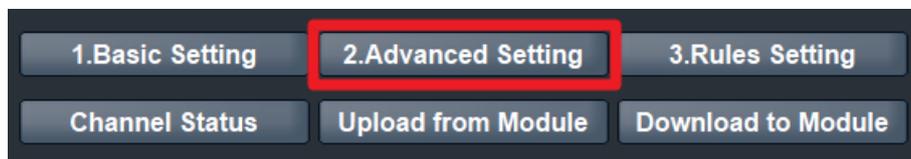
Block Setting
Nickname Setting

WISE-5801 Local Address	Coil Output (0x)		Discrete Input (1x)		Input Register (3x)		Holding Register (4x)
	Address	Number	Address	Number	Address	Number	
280	0		0		16		
281	6		6		6		
282					Type		
283					32-bit Unsigned Long		
284							
285							
286							
287							

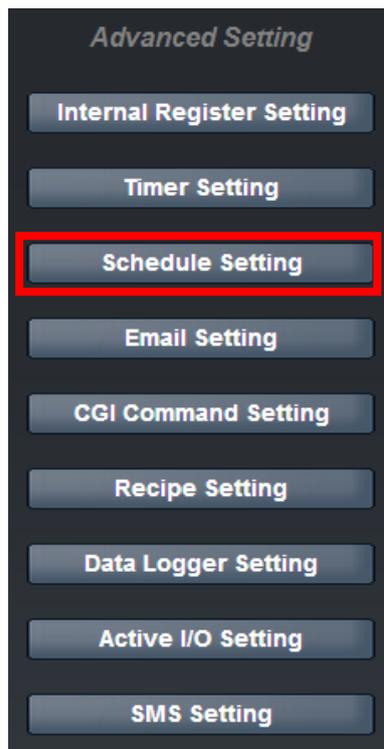
Remove All
Expand All
Collapse All

Save

6. Open the WISE WEB page and get into the “2.Advanced Setting” page.



7. Click on “Schedule Setting” to get into the setting page.



8. On the “Schedule Setting” page, set two schedule “working day (Schedule1)” and “rest (Schedule2)”, then save it. Please refer the “Schedule Setting” section of WISE-580x user manual for detail setting.

**Schedule Setting Page**

Schedule Amount: 2

Index: 1

Initial Status: Enable

Date: 2013 / 11 ~ 2013 / 12

Time: 8:00 ~ 18:00

: In Range

: Out of Range

2013 / 11							2013 / 12						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1	2	1	2	3	4	5	6
3	4	5	6	7	8	9	8	9	10	11	12	13	14
10	11	12	13	14	15	16	15	16	17	18	19	20	21
17	18	19	20	21	22	23	22	23	24	25	26	27	28
24	25	26	27	28	29	30	29	30	31				

**Schedule Setting Page**

**Schedule Amount**

**Index**

**Initial Status**

**Date**   ~

**Time**    ~

2013 / 11							2013 / 12						
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2	1	2	3	4	5	6	7
3	4	5	6	7	8	9	8	9	10	11	12	13	14
10	11	12	13	14	15	16	15	16	17	18	19	20	21
17	18	19	20	21	22	23	22	23	24	25	26	27	28
24	25	26	27	28	29	30	29	30	31				

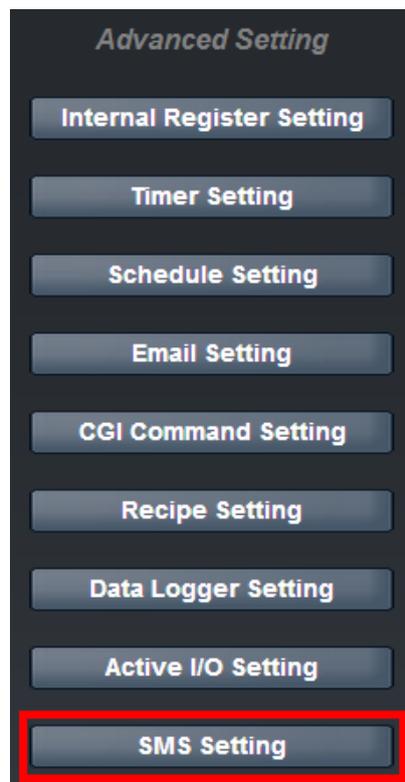
9. Click on "Data Logger Setting" to get into the setting page.

*Advanced Setting*

10. On the “Data Logger Setting” page, check the box in front of the “Enable Data Logger” to start the data logger function and input the data. And then check the box in front of the “FTP” and input the data. In this case, the IP of control center is 192.168.100.130 and port is 21. Please refer the “Data Logger Setting” section of WISE-580x user manual for detail setting.

<i>Data Logger Setting Page</i>		
<input checked="" type="checkbox"/> <b>Enable Data Logger</b>		
<b>File Name</b>	<input type="text" value="log"/>	
<b>Data Format</b>	<input type="text" value="\$n1ri0, \$n2ci0,"/> <input type="text"/>	
	Module: <input type="text" value="ET-7018Z(1)"/> <input type="button" value="v"/> Coil Output <input type="text" value=""/> <input type="button" value="v"/> Addr. <input type="text" value="0(DO0)"/> <input type="button" value="Add"/>	
<b>Sampling Period</b>	<input checked="" type="checkbox"/> Enable <input type="text" value="5 mins"/> <input type="button" value="v"/>	
<b>Close Log File</b>	Every <input type="text" value="1"/> <input type="button" value="v"/> hour(s)	
<b>Log File Sending Attribute</b>		
<input type="checkbox"/> <b>Email</b>	<b>Index</b>	Setup Email Setting First (Send as attachment when the log file is closed)
<input checked="" type="checkbox"/> <b>FTP</b>	<b>IP</b>	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="100"/> . <input type="text" value="130"/>
	<b>Port</b>	<input type="text" value="21"/>
	<b>Login ID</b>	<input type="text" value="WISE-580x-MTCP"/> <input type="checkbox"/> Anonymous
	<b>Password</b>	<input type="text" value="....."/>
	<b>FTP Path</b>	<input type="text" value="/log"/>
	<b>Timeout</b>	<input type="text" value="3000"/> milliseconds (Range: 1 ~ 65535)
	<b>Time to Upload</b>	<input checked="" type="radio"/> Log file is closed <input type="radio"/> Every day at <input type="text" value="0"/> <input type="button" value="v"/> o'clock
<input type="button" value="Save"/>		

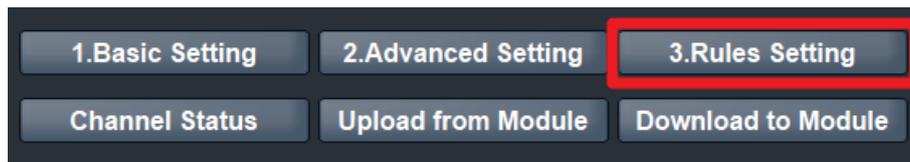
11. On the Advanced Setting page; click on “SMS Setting” to get into the setting page.



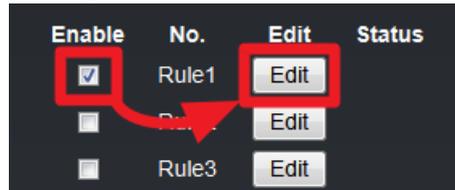
12. On the “SMS Setting” page, specify the SMS Amount to be “2”, Temperature Alarm (SMS1) and Entrance Locking System (SMS2). Please refer the “SMS Setting” section of WISE-580x user manual for detail setting.

SMS Setting Page	
PIN Code	....
<input checked="" type="checkbox"/> Enable WISE to accept SMS Command	
Authorized Phone Number (Note: Please input country, area code and number.)	886912345678  
Quick Command	Quick Command List    Setting No Quick command exist.
SMS Alarm Sending from WISE	
SMS Amount	2
Index	1
Phone Number	886928853454
Message (Note: The length of the message cannot exceed 160 characters.)	<input type="checkbox"/> Unicode FOCUS:\$n1ri0, the temperature is over the safe range!  Insert Real-Time Variable Module: ET-7018Z(1) Coil Output    Addr. 0(DO0)    Add
Save	

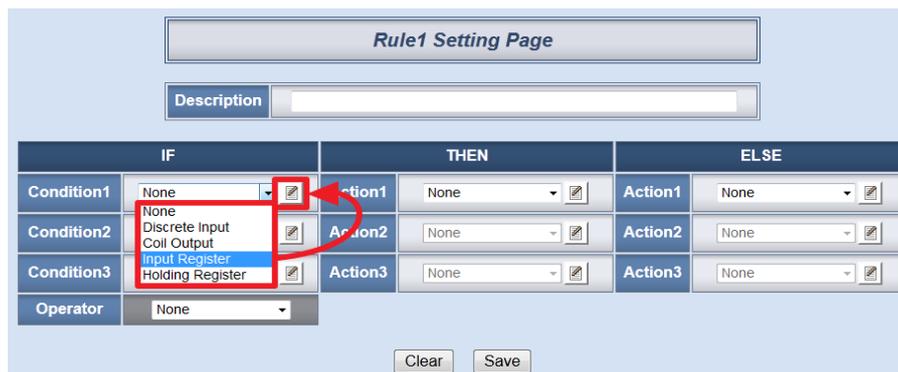
13. Click on “3.Rules Setting” to get into the Rule Setting page.



14. Check the “Rule 1” checkbox to enable “Rule 1”, then click “Rule 1” “Edit” button for “Rule 1” editing.



15. On the “Rule1 Setting Page”(on the right side), select “Input Register” as IF Condition for “Rule 1”, and then click on the right side button to get into the “Input Register Condition Setting” page to edit detailed information.



16. In the “Module & Address” field, select “ET-7018Z” and Address “0(AI0)”; in the “Operator” field, select “>” and in the “Value” field, select “Assign Value as” from the dropdown list and assign the value as “80”. Click “Save” button to save the settings and get back to the “Rule1 Setting Page”.



17. In the “THEN” section, in the “Action1” field, select “Coil Output” from the dropdown list; and then click on the right side button to get into the “Coil Output Action Setting” page to edit detailed information.
18. In the “Module & Address” section, select “ET-7018Z” and address “0(DO0)” from the dropdown list. In the “Address Value” field, select “OFF” from the dropdown list. Click “Save” button to save the settings and return to Rules 1 Setting Page.

<i>Coil Output Action Setting</i>	
<b>Module &amp; Address</b>	ET-7018Z(1) ▾ Address 0(DO0) ▾
<b>Address Value</b>	OFF ▾
<input type="button" value="Save"/>	

19. In the “THEN” section, in the “Action2” field, select “SMS Alarm” from the dropdown list; and then click on the right side button to get into the “SMS Alarm Action Setting” page to edit detailed information.
20. In the “Index” field, select “1” from the dropdown list. Click “Save” button to save the settings and return to Rules 1 Setting Page.

<i>SMS Alarm Action Setting</i>	
<b>Index</b>	1 ▾
<b>SMS Alarm Infomation</b>	
<b>Phone Number</b>	8869123456789
<b>Message</b>	FOCUS:\$n1ri0, the temperature is over the safe range.
<input type="button" value="Save"/>	

21. In the “THEN” section, in the “Action3” field, select “Data Logger” from the dropdown list; and then click on the right side button to get into the “Data Logger Action Setting” page to edit detailed information.

22. In the “Action” field, select “One-Time Log” from the dropdown list, click “Save” button to save the settings and get back to the “Rule 1 Setting Page”.

**Data Logger Action Setting**

**Action** One-Time Log ▼

23. Make sure all Rule 1 settings are accurate, click “Save” button to save the changes.

**Rule1 Setting Page**

Description

	IF		THEN		ELSE
Condition1	Input Register ▼	Action1	Coil Output ▼ One Time Repeat	Action1	None ▼
Condition2	None ▼	Action2	SMS Alarm ▼ One Time Repeat	Action2	None ▼
Condition3	None ▼	Action3	Data Logger ▼ One Time Repeat	Action3	None ▼
Operator	None ▼				

24. Check the “Rule 2” checkbox to enable “Rule 2”, then click “Rule 2” “Edit” button for “Rule 2” editing.

Enable	No.	Edit	Status
<input checked="" type="checkbox"/>	Rule1	<input type="button" value="Edit"/>	OK
<input checked="" type="checkbox"/>	Rule2	<input type="button" value="Edit"/>	
<input type="checkbox"/>	Rule3	<input type="button" value="Edit"/>	

25. On the “Rule2 Setting Page”(on the right side), select “Schedule” as IF Condition for “Rule 2”, and then click on the right side button to get into the “Schedule Condition Setting” page to edit detailed information.

26. In the “Index” field, select “2” and in the “Condition” select “In Range” from the dropdown list. Click “Save” button to save the settings and return to Rules 2 Setting Page.

Schedule Condition Setting	
Index	2
Condition	In Range
Save	

27. In the “THEN” section, in the “Action1” field, select “Coil Output” from the dropdown list; and then click on the right side button to get into the “Coil Output Action Setting” page to edit detailed information.

28. In the “Module & Address” section, select “PET-7060(2)” and address “1(DO1)” from the dropdown list. In the “Address Value” field, select “ON”. Click “Save” button to save the settings and return to Rule 2 Setting Page.

Coil Output Action Setting	
Module & Address	PET-7060(2) Address 1(DO1)
Address Value	ON
Save	

29. In the “ELSE” section, in the “Action1” field, select “Coil Output” from the dropdown list; and then click on the right side button to get into the “Coil Output Action Setting” page to edit detailed information.

30. In the “Module & Address” section, select “PET-7060(2)” and address “1(DO1)” from the dropdown list. In the “Address Value” field, select “OFF” from the dropdown list. Click “Save” button to save the settings and return to Rules 2 Setting Page.

Coil Output Action Setting	
Module & Address	PET-7060(2) Address 1(DO1)
Address Value	OFF
Save	

31. Make sure all Rule 2 settings are accurate, click “Save” button to save the changes.

	IF	THEN	ELSE
Condition1	Schedule	Action1 Coil Output One Time	Action1 Coil Output One Time
Condition2	None	Action2 None	Action2 None
Condition3	None	Action3 None	Action3 None
Operator	None		

32. Check the “Rule 3” checkbox to enable “Rule 3”, then click “Rule 3” “Edit” button for “Rule 3” editing.

Enable	No.	Edit	Status
<input checked="" type="checkbox"/>	Rule1	Edit	OK
<input checked="" type="checkbox"/>	Rule2	Edit	OK
<input checked="" type="checkbox"/>	Rule3	Edit	

33. On the “Rule3 Setting Page”(on the right side), select “Schedule” as IF Condition for “Rule 3”, and then click on the right side button to get into the “Schedule Condition Setting” page to edit detailed information.
34. In the “Index” field, select “1”; in the “Condition” field, select “Out of Range”. Click “Save” button to save the settings and get back to the “Rule3 Setting Page”.

Schedule Condition Setting	
Index	1
Condition	Out of Range

35. In the “Operator” field, select “AND” from the dropdown list.

**Rule3 Setting Page**

Description

	IF		THEN		ELSE
Condition1	Schedule	Action1	None	Action1	None
Condition2	None	Action2	None	Action2	None
Condition3	None	Action3	None	Action3	None
Operator	<div style="border: 2px solid red; padding: 2px;">           AND            None            AND            OR         </div>				

Clear Save

36. In the “IF” section, in the “Condition2” field, select “Discrete Input” from the dropdown list; and then click on the right side button to get into the “Discrete Input Condition Setting” page to edit detailed information.
37. In the “Module & Address” section, select “PET-7060(2)” and address “0(DI0)” from the dropdown list. In the “Address Value” field, select “ON” from the dropdown list. Click “Save” button to save the settings and return to Rules 3 Setting Page.

**Discrete Input Condition Setting**

<b>Module &amp; Address</b>	PET-7060(2) Address 0(DI0)
<b>Address Value</b>	ON

Save

38. In the “THEN” section, in the “Action1” field, select “Coil Output” from the dropdown list; and then click on the right side button to get into the “Coil Output Action Setting” page to edit detailed information.
39. In the “Module & Address” section, select “PET-7060(2)” and address “0(DO0)” from the dropdown list. In the “Address Value” field, select “ON” from the dropdown list. Click “Save” button to save the settings and return to Rules 3 Setting Page.

<i>Coil Output Action Setting</i>	
<b>Module &amp; Address</b>	PET-7060(2) ▾ Address 0(DO0) ▾
<b>Address Value</b>	ON ▾
<input type="button" value="Save"/>	

40. In the “THEN” section, in the “Action2” field, select “SMS Alarm” from the dropdown list; and then click on the right side button to get into the “SMS Alarm Action Setting” page to edit detailed information.
41. In the “Index” field, select “2” from the dropdown list. Click “Save” button to save the settings and return to Rules 3 Setting Page.

<i>SMS Alarm Action Setting</i>	
<b>Index</b>	2 ▾
SMS Alarm Infomation	
<b>Phone Number</b>	886928853454
<b>Message</b>	FOCUS:\$n2co0, someone inside the factory on n on-working hour.
<input type="button" value="Save"/>	

42. In the “THEN” section, in the “Action3” field, select “Data Logger” from the dropdown list; and then click on the right side button to get into the “Data Logger Action Setting” page to edit detailed information.
43. In the “Action” field, select “One-Time Log” from the dropdown list. Click “Save” button to save the settings and return to Rules 3 Setting Page.

<i>Data Logger Action Setting</i>	
<b>Action</b>	One-Time Log ▾
<input type="button" value="Save"/>	

44. In the “ELSE” section, in the “Action1” field, select “Coil Output” from the dropdown list; and then click on the right side button to get into the “Coil Output Action Setting” page to edit detailed information.

45. In the “Module & Address” section, select “PET-7060(2)” and address “0(DO0)” from the dropdown list. In the “Address Value” field, select “OFF” from the dropdown list. Click “Save” button to save the settings and return to Rules 3 Setting Page.

**Coil Output Action Setting**

<b>Module &amp; Address</b>	PET-7060(2) Address 0(DO0)
<b>Address Value</b>	OFF

Save

46. Make sure all Rule 3 settings are accurate, click “Save” button to save the changes.

**Rule3 Setting Page**

Description

	IF		THEN		ELSE
Condition1	Schedule	Action1	Coil Output <input checked="" type="radio"/> One Time <input type="radio"/> Repeat	Action1	Coil Output <input checked="" type="radio"/> One Time <input type="radio"/> Repeat
Condition2	Discrete Input	Action2	SMS Alarm <input checked="" type="radio"/> One Time <input type="radio"/> Repeat	Action2	None
Condition3	None	Action3	Data Logger <input checked="" type="radio"/> One Time <input type="radio"/> Repeat	Action3	None
Operator	AND				

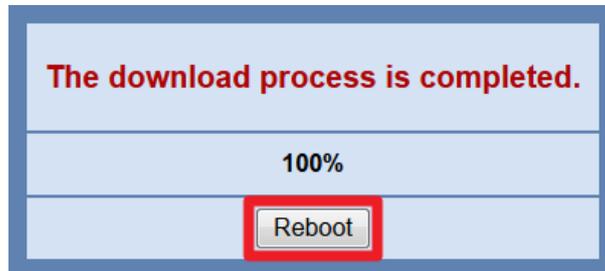
Clear Save

47. After finish the rule editing, click the “Download to Module” button.

1.Basic Setting 2.Advanced Setting 3.Rules Setting

Channel Status Upload from Module **Download to Module**

48. After the download process is completed, click “Reboot” button to make the new updated settings take effect.



● **Rule Overview :**

**Rule Overview**

**Rule1(Enable)**  
Description:  
**< IF >**  
ET-7018Z(1) Input Register 0(AI0) > 80  
**< THEN >**  
ET-7018Z(1) Coil Output 0(DO0) = OFF (One Time)  
SMS Alarm 1 Send (One Time)  
Data Logger One-Time Log (One Time)

**Rule2(Enable)**  
Description:  
**< IF >**  
Schedule 2 In Range  
**< THEN >**  
PET-7060(2) Coil Output 1(DO1) = ON (One Time)  
**< ELSE >**  
PET-7060(2) Coil Output 1(DO1) = OFF (One Time)

**Rule3(Enable)**  
Description:  
**< IF >**  
Schedule 1 Out of Range (AND)  
PET-7060(2) Discrete Input 0(DI0) = ON  
**< THEN >**  
PET-7060(2) Coil Output 0(DO0) = ON (One Time)  
SMS Alarm 2 Send (One Time)  
Data Logger One-Time Log (One Time)  
**< ELSE >**  
PET-7060(2) Coil Output 0(DO0) = OFF (One Time)