

1. Network Setting

The screenshot shows the 'Device Settings' window with the following sections:

- Device Info:** Virtual Serial (Not Use), Dev Type, Dev Name (AD), Dev ID (2853C62A203D), Firmware Ver (V1.598).
- Function of the device:**
 - ☐ Web Download
 - ☒ DNS System
 - ☒ REAL_COM Protocol
 - ☐ Modbus TCP To RTU
 - ☒ Serial Commnad
 - ☒ DHCP Support
 - ☐ Storage Extend
 - ☒ Multi-TCP Connection
- Network:**
 - IP Mode: DHCP
 - IP Address: 192 . 168 . 1 . 185
 - Port: 4196
 - Work Mode: TCP Server
 - Net Mask: 255 . 255 . 255 . 0
 - Gateway: 192 . 168 . 1 . 1
 - Dest. IP/Domain: 114.55.89.143 (Local IP)
 - Dest. Port: 5555
- Serial:**
 - Baud Rate: 115200
 - Data Bits: 8
 - Parity: None
 - Stop Bits: 1
 - Flow Control: None
- Advanced Settings:**
 - DNS Server IP: 192 . 168 . 1 . 1
 - Dest. Mode: Dynamic
 - Transfer Protocol: None
 - Keep Alive Time: 60 (s)
 - Reconnet Time: 12 (s)
 - Http Port: 80
 - UDP Group IP: 230 . 90 . 76 . 1
 - ☐ Register Pkt: (ASCII)
 - ☐ Restart for no data every 300 Sec.
 - ☐ Enable send parameter every 5 Min.
 - More Advanced Settings...
 - Framing Rule:
 - Max Frame Length: 1300 (Byte)
 - Max Interval(Smaller will better) 3 (Ms)

Buttons at the bottom: Get Default, Save As Default, Load Default, Modify Key, Load Firmware, Restart Dev, Modify Setting, Cancel.

Firstly, use VirCom tool on PC to find KC868-COL's IP and Port.

Note: in VirCom [Work Mode]=[TCP Server]

The 'NetWork Setting' dialog box shows:

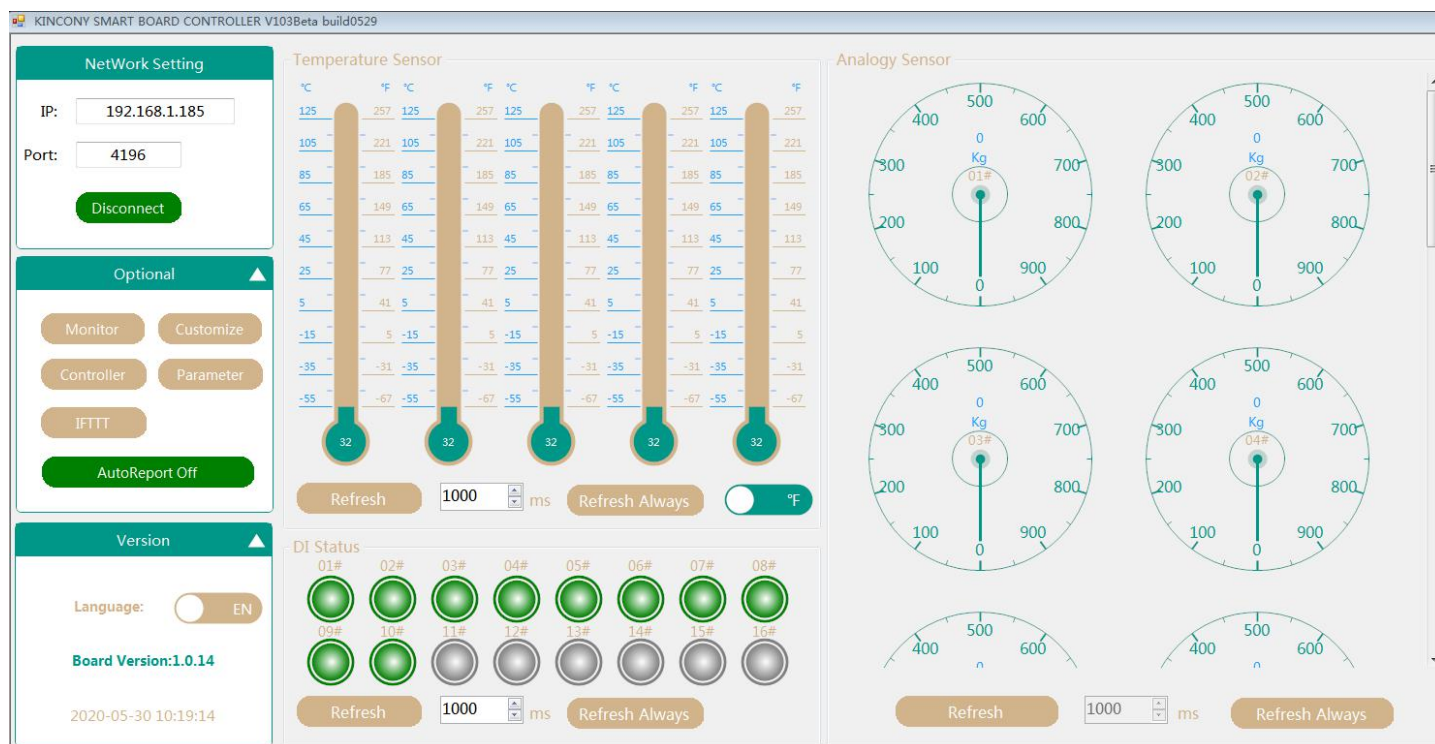
- IP: 192.168.1.185
- Port: 4196
- Disconnect button

Input IP and Port

Connect/disconnect--- PC Connect/disconnect with KC868-COL. All works need connect successfully firstly.

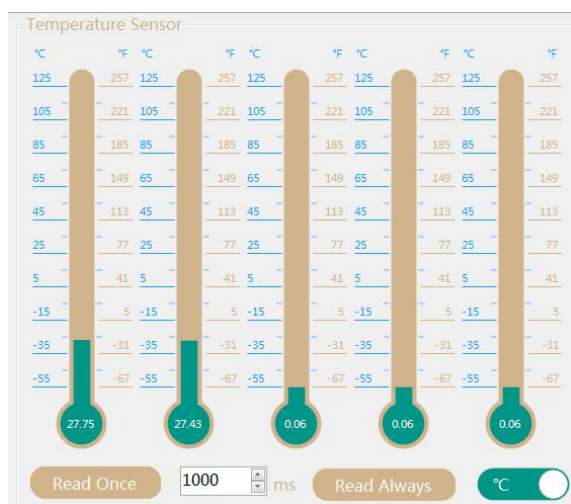
2.Optional

2.1 Monitor



Temperature Sensor

Read 5 channels DS18B20 temperature sensors' value, range(-55 °C--125 °C), °C is default unit, can change to °F to display.



[Refresh]:Read all temperature sensors for one time.

[Refresh Always]--- Read all temperature sensors at regular time that you set. (100ms—3000ms)

DI Status

1#---16#--- 16 channel Digital Input Channel

[Refresh]:Read all DI for one time.

[Refresh Always]--- Read all DI at regular time that you set. (100ms—3000ms)

Analogy Sensor

1#---16#--- 16 channel Analog Input Channel

[Refresh]:Read all AI for one time.

[Refresh Always]--- Read all AI at regular time that you set. (100ms—3000ms)

Analogy Sensor Property

Communication Transparent Transport

RS485-- Edit command, send it by KC868-COL's RS485 port, Communication baud rate is 9600bps.

RS232-- Edit command, send it by KC868-COL's RS232 port, Communication baud rate is 115200bps.

Hex--- Check this option, will convert string command to HEX format, otherwise send command by AnsiString format.

Clear --- Clear Edit content

Send --- Send command to port that you have selected.

Mainly for debug and testing use.

User define Command

Create MAX 32 user define command line for "IFTTT" use. "User define command" output to KC868-COL's RS232 port.

Hex--- Check this option, will convert string command to HEX format, otherwise send command by AnsiString format.

Chose "User define command" ID, then input command in edit area.

Clear Dis.-- Clear edit area.

Read Cur.-- Read selected ID of "User define command" from KC868-COL

Write Cur.-- Write selected ID of "User define command" to KC868-COL

Delete Cur.-- Delete selected ID of "User define command" in KC868-COL

Delete All.-- Delete all ID of "User define command" in KC868-COL

2.3 Controller

Relay Input Status

01#

02#

03#

04#

05#

06#

07#

08#

ReadOnce

Relay Control

01#	02#	03#	04#	05#	06#
07#	08#	09#	10#	11#	12#
13#	14#	15#	16#	17#	18#
19#	20#	21#	22#	23#	24#
25#	26#	27#	28#	29#	30#
31#	32#				

☒ H32 Series

Read State

Muliti. Out

All Open

All Close

Relay Input Status---01#--08# input port of KC868-Hx controller
[ReadOnce]:Read input status of KC868-Hx controller for one time.

Relay Control---

[01#--32#]: 32 channel relay that connect with KC868-COL for manual control. Press ico, relay ON,color will be Green.
Press ico, relay OFF, color will be Yellow.

[Read State]--- Read controller's relay status

[Multi.Out]--- Right mouse button click relay ico, ico will dispaly “S” for select the relay, you can select for more relay channels, then press “Multi.Out” button for turn ON relays once time.

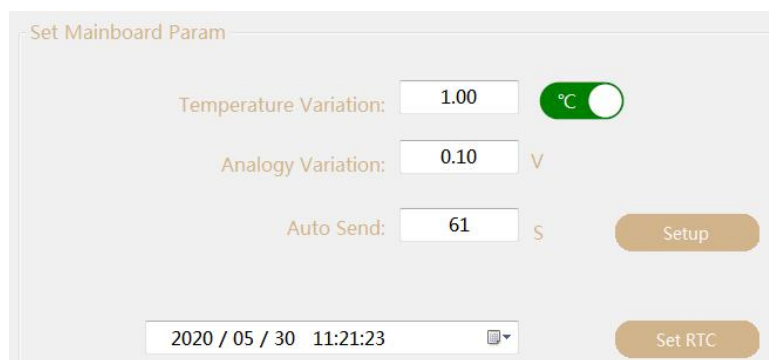


[All Open]----Turn ON all relays

[All Close]----Turn OFF all relays

Note: KC868-COL can connect with any controller of KC868-H32L,KC868-H16,KC868-H8,KC868-H4,KC868-H2 for different relay channel selected for automatic control system.

2.4 parameter



Set Main board Param

Temperature Variation: Report send message to PC when the temperature value change difference at variation value.

For example: when “Temperature Variation” is set to 1℃, if the second channel temperature rises from 25℃ to 26℃ or the temperature drops from 26℃ to 25℃, KC868-COL will automatically send the second channel temperature data to PC, and the monitor dashboard will refresh the new data value of the second channel temperature sensor (Note: need Enable the "Auto Report" function in the software homepage).

Analogy Variation: Report send message to PC when the analogy value change difference at variation value.

For example: when “Analogy Variation” is set to 0.1V, if the second channel rises from 2.5V to 2.6V or drops from 2.6V to 2.5V, KC868-COL will automatically send the second channel data to PC, and the monitor dashboard will refresh the new data value of the second channel sensor (Note: need Enable the "Auto Report" function in the software homepage).

Auto Send---KC868-COL auto report to PC at a regular time for temperature and analogy sensor. (0--254second)

[Setup]--- Write config to KC868-COL

Data and Time Setting--- It's display the KC868-COL's system data and time.

[Set RTC]-- Set the new date and time for KC868-COL

2.5 IFTTT

IFTTT Configuration

<<<Current Channel:01 Then Execute Num:01>>>

Conditions list:

Condition1: FixTimeType:[Days<Monday,Tuesday,Wednesday,Thursday,Friday,Saturday,

OutDef list:

OutDef1: RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef2: DelayTimeOutType:[Delaytime<1S>]

OutDef3: RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef4: DelayTimeOutType:[Delaytime<1S>]

OutDef5: RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef6: DelayTimeOutType:[Delaytime<1S>]

OutDef7: RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef8: DelayTimeOutType:[Delaytime<1S>]

OutDef9: RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef10: DelayTimeOutType:[Delaytime<1S>]

OutDef11: RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef12: DelayTimeOutType:[Delaytime<1S>]

OutDef13: RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef14: DelayTimeOutType:[Delaytime<1S>]

ConditionCnt: 17 Cur.Number: 1

Number01

Read Cur. Edit Cur. Edit Other

Export Clear Cur. Clear All

CheckStatus 1000 ms

IFTTT Configuration--- List IFTTT command details of selected ID

ConditionCnt--- total count of IFTTT command have been created

Cur.Number--- Current Number of IFTTT command

Number**--- IFTTT command ID , MAX 50 command

[Read Cur.]--- -Read IFTTT command details that selected ID

[Edit Cur.]---- Edit IFTTT command that selected ID, after click will display IFTTT Setup window

The screenshot shows the 'IFTTT SETUP' window with the title 'Number:01'. It is divided into several sections:

- IF Command List(Max 10):** A list box containing a single command: 'Cond.01>>>FixTimeType:[Days<Monday,Tuesday,Wednesday,Thursday,Friday,Saturday>]'. Below it is a scroll bar.
- THEN Command List (Max 50):** A list box containing ten commands, all starting with 'OutDef.01>>>RelayOutType:[Channel<Channel20> set to TOGGLE relay]' followed by a delay time (e.g., 'Delaytime<1S>').
- Channel Number:01** and an **Apply** button at the bottom left.
- DI IF Section:** Includes checkboxes for days of the week (Monday to Sunday), a time field set to '11:43', and an 'Add If1' button.
- AI IF Section:** Includes a dropdown for 'IN01', a 'Triggle Type' dropdown set to 'EdgeP', a 'Hold Time(1-255s)' field set to '2', and an 'Add If2' button.
- Temperature IF Section:** Includes a dropdown for 'Channel01', a 'Triggle Type' dropdown set to '>=', a 'Threshold' field set to '1.0', a unit dropdown set to 'v', a 'Hold Time(1-255s)' field set to '2', and an 'Add If3' button.
- Edit THEN** button at the bottom right.

IF Command List (MAX 10 lines) --- display have added if command

THEN Command List (Max 50)--- display have added THEN command

Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday---- Select week for IF command

[Add If1]----- add week IF condition to “IF Command List “

DI IF

IN01---IN16----16 channel DI input ID

Trigger Type---Select the rising edge / falling edge trigger mode according to the type of sensor actually used

Hold Time(1-255s)--- When the holding time of rising edge or falling edge reaches the preset value, the trigger is successful

[Add If2]-----add DI IF condition to “IF Command List “

AI IF

Channel01---Channel16---- 16 channel AI input ID

Trigger Type---Select comparison conditions for “>=” or “<” with threshold value

Hold Time(1-255s)----When the holding time of analog sensor is greater than or less than the threshold value,the trigger is successful

threshold---- trigger value of analog sensor

[Add If3]---add AI IF condition to “IF Command List “

Temperature IF

Channel01---Channel05---- 5 channel temperature sensor ID

Trigger Type---Select comparison Temperature for “>=” or “<” with threshold value

Hold Time(1-255s)----When the holding time of temperature sensor is greater than or less than the threshold value,the trigger is successful

threshold---- trigger value of temperature

[Add If4]---add Temperature IF condition to “IF Command List “

IFTTT SETUP Number01

IF Command List(Max 10):

Cond.01>>FixTimeType:[Days<Monday,Tuesday,Wednesday,Thursday,Friday,Saturday,Sunday>]

THEN Command List (Max 50) :

OutDef.01>>>RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef.02>>>DelayTimeOutType:[Delaytime<1S>]

OutDef.03>>>RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef.04>>>DelayTimeOutType:[Delaytime<1S>]

OutDef.05>>>RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef.06>>>DelayTimeOutType:[Delaytime<1S>]

OutDef.07>>>RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef.08>>>DelayTimeOutType:[Delaytime<1S>]

OutDef.09>>>RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef.10>>>DelayTimeOutType:[Delaytime<1S>]

Channel Number:01

Apply

Delay Time(1-65535s): 1

Add Then1

Relay Out

Relay: Relay01 Action: CLOSE

Add Then2

User Define

Usr Define Number: 01

Add Then3

IFTTT Circle Excute Times (1-255) 1

Edit IF

EDIT THEN

Delay Time(1-65535s)--- Delay time for 1-65535 seconds can be set.

[Add Then1]---add Delay time action to “THEN Command List “

Relay Out

Relay--- Chose relay ID

Action--- CLOSE,OPEN,TOGGLE

CLOSE: Turn OFF relay of ID you have selected.

OPEN: Turn ON relay of ID you have selected.

TOGGLE: OFF->ON or ON->OFF relay of ID you have selected, just change relay status.

[Add Then2]---add relay action to “THEN Command List “

User Define

Usr Define Number--- Select ID of user define command you have created in “Customize” function.

[Add Then3]---add user define action to “THEN Command List “

IFTTT Circle Excute Timers(1-255)--- When the if condition is TRUE, how many times actions run.

[Apply]---after config IFTTT setting, write config to KC868-COL

IFTTT SETUP

IF Command List(Max 10):

Cond.01>>FixTimeType:[Days<Monday,Tuesday,Wednesday,Thursday,Friday,Saturday,Sunday>]

THEN Command List (Max 50) :

OutDef.01>>>RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef.02>>>DelayTimeOutType:[Delaytime<1S>]

OutDef.03>>>RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef.04>>>DelayTimeOutType:[Delaytime<1S>]

OutDef.05>>>RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef.06>>>DelayTimeOutType:[Delaytime<1S>]

OutDef.07>>>RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef.08>>>DelayTimeOutType:[Delaytime<1S>]

OutDef.09>>>RelayOutType:[Channel<Channel20> set to TOGGLE relay]

OutDef.10>>>DelayTimeOutType:[Delaytime<1S>]

Channel Number: Number01

Apply

Monday Tuesday Wednesday Thursday Friday Saturday Sunday

12:50

Add If1

DI IF

IN01

Triggle Type: EdgeP

Hold Time(1-255s) : 2 S

Add If2

AI IF

Channel01

Triggle Type: >=

Hold Time(1-255s) : 2 S

Threshold: 1.0 V

Add If3

Temperature IF

Channel01

Triggle Type: >=

Hold Time(1-255s) : 2 S

Threshold: 10.00

Add If4

Edit THEN

Edit Other

When Click “Edit Other” button on “IFTTT” window, also will go to edit window, the new window just can chose the IFTTT command ID number for edit.

Channel Number--- you need chose channel number firstly, then begin to set “IF” and “THEN” command.

[Export]--- export all IFTTT config information to folder “data”.

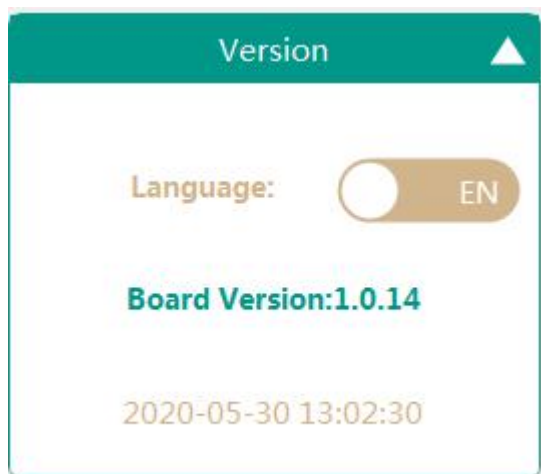
[Clear Cur.]--- delete IFTTT command of selected ID from KC868-COL

[Clear All]--- delete all IFTTT command from KC868-COL

Press “》” can open window for IFTTT running log information, use mouse right button can clear and copy to clipboard.

Check Status option--- use for search for KC868-COL at a regular time, not check is better.

3.Version



Language---chose language for Chinese or English

Board Version---KC868-COL firmware version

4. How to change software language to your own language

You can modify “ui.ini” File content, rename menus and device names by your own languages for different countries to use.

