InfraGuard

Rack Sensor System

User Manual

GMS-02-S Environmental Sensor Management Software

Designed and manufactured by Austin Hughes

Legal Information

First English printing, September 2022

Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. We are not liable for any injury or loss that results from the use of this equipment.

Safety Instructions

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

- Unplug equipment before cleaning. Don't use liquid or spray detergent; use a moist cloth.
- Keep equipment away from excessive humidity and heat. Preferably, keep it in an air-conditioned environment with temperatures not exceeding 40º Celsius (104º Fahrenheit).
- When installing, place the equipment on a sturdy, level surface to prevent it from accidentally falling and causing damage to other equipment or injury to persons nearby.
- When the equipment is in an open position, do not cover, block or in any way obstruct the gap between it and the power supply. Proper air convection is necessary to keep it from overheating.
- Arrange the equipment's power cord in such a way that others won't trip or fall over it.
- If you are using a power cord that didn't ship with the equipment, ensure that it is rated for the voltage and current labelled on the equipment's electrical ratings label. The voltage rating on the cord should be higher than the one listed on the equipment's ratings label.
- Observe all precautions and warnings attached to the equipment.
- If you don't intend on using the equipment for a long time, disconnect it from the power outlet to prevent being damaged by transient over-voltage.
- Keep all liquids away from the equipment to minimize the risk of accidental spillage. Liquid spilled on to the power supply or on other hardware may cause damage, fire or electrical shock.
- Only qualified service personnel should open the chassis. Opening it yourself could damage the equipment and invalidate its warranty.
- If any part of the equipment becomes damaged or stops functioning, have it checked by qualified service personnel.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
  - ☐ Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - ☐ Repair or attempted repair by anyone not authorized by us.
  - ☐ Any damage of the product due to shipment.
  - ☐ Removal or installation of the product.
  - ☐ Causes external to the product, such as electric power fluctuation or failure.
  - ☐ Use of supplies or parts not meeting our specifications.
  - ☐ Normal wear and tear.
  - ☐ Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in business, industrial and commercial environments.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

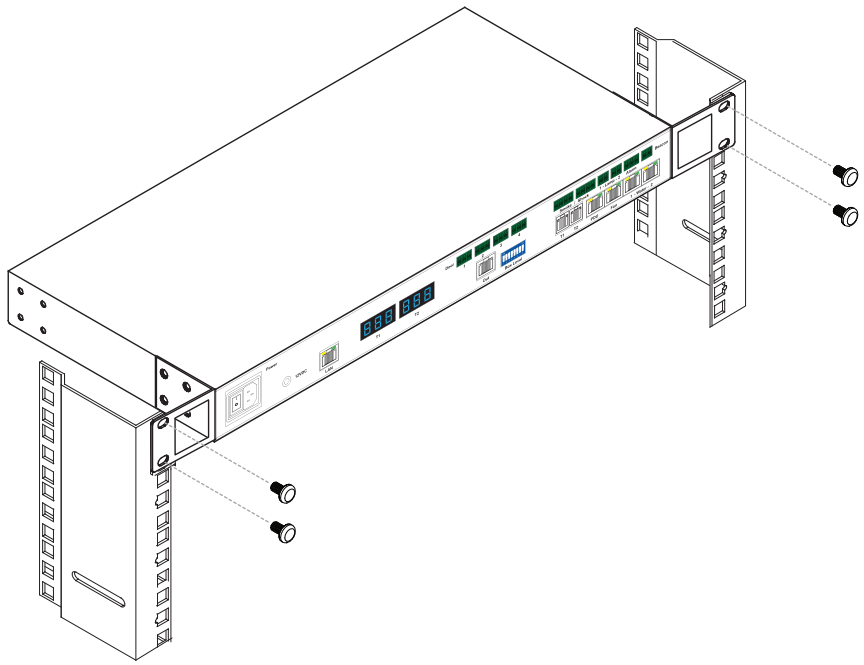
- Re-position or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Before Installation

- It is very important to locate the equipment in a suitable environment.
- The surface for placing and fixing the equipment should be stable and level or mounted into a suitable rack.
- Make sure the place has good ventilation, is out of direct sunlight, away from sources of excessive dust, dirt, heat, water, moisture and vibration.
- Position the equipment with respect to related facilities.

EC Box Installation

- Suggest the installation at the rear top mounting of rack
- M6 screws set not provided.



Content

Part I. Hardware

< 1.1 > Package Contents

Unpacking

The equipment comes with the standard parts shown on the package contents. Check and make sure they are included and in good condition. If anything is missing, or damage, contact the supplier immediately.

- EC-300M Master EC Box x 1
- 6' Power cord x 1

OR

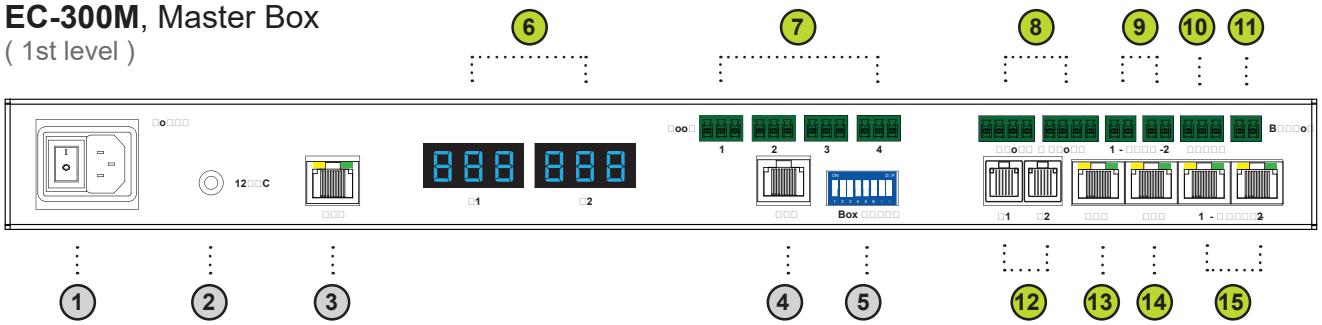
- EC-300 Expansion EC Box x 1
- 6' Power cord x 1

< 1.2 > InfraGuard Features & Specifications

	EC-300M (Master Box)	EC-300 (Expansion Box)
Daisy Chain	1st Level	2nd - 16th Level via Master Box
SNMP	✔	✘
LAN Port	✔	✔
Daisy Chain Port - LINK	✘	✔
Daisy Chain Port - OUT	✔	✔
Dual Power Input Option	✔	✔
Temperature LED	✔	✔
Temp-Humid Sensor	2	2
Smoke / Shock Sensor	2	2
Water Sensor	2	2
Door Sensor	4	4
LED Light Bar	2	2
LED Flashing Beacon	1	1
Alarm Board	1	1
Integrated PDU	4 (daisy chain)	4 (daisy chain)
Integrated Fan Unit	4 (daisy chain)	4 (daisy chain)
Product Dimension (W x D x H)	400 x 135 x 39.7 mm / 15.7 x 5.3 x 1.6 inch	
Packing Dimension (W x D x H)	557 x 367 x 98 mm / 21.9 x 14.4 x 3.9 inch	
Net Weight	1.06 kgs / 2.3 lbs	
Gross Weight	2.2 kgs / 4.8 lbs	
Power Consumption	Auto-sensing 100 to 240VAC, 50 / 60Hz, Max. 48 Watt	
Operating Temperature	0 to 55ºC Degree	
Storage Temperature	-5 to 60ºC Degree	
Relative Humidity	5~90%, non-condensing	
Mounting	1U Rackmount	
Safety Regulatory	FCC & CE certified	
Environmental	RoHS & REACH compliant	

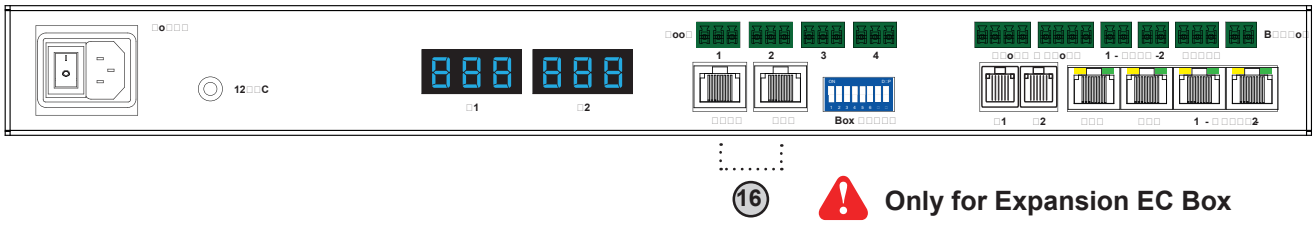
< 1.3 > EC Box

EC-300M, Master Box
(1st level)



1. Power input
2. Dual power input (option)
3. LAN port (RJ-45 connect to network device)
4. OUT port (RJ-45 connect to level 2nd expansion EC box)
5. Dip switch (level setting)
6. Temp. LED display x 2
7. Door sensor port x 4
8. Smoke / Shock sensor port x 2
9. LED Light Bar port x 2
10. Port for 3rd party alarm board x 1
11. LED beacon port x 1
12. Temp. & Humid. sensor port x 2
13. PDU port x 1
    (RJ-45, up to PDU daisy chain level x 4)
14. Fan unit port x 1
    (RJ-45, up to fan unit daisy chain level x 4)
15. Water sensor port x 2

EC-300, Expansion Box
(From 2nd - 16th level)



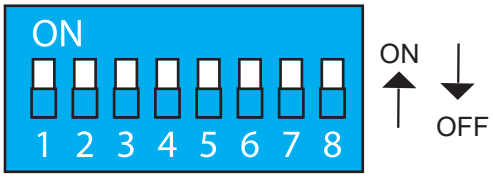
Only for Expansion EC Box

16. Link & Out port
    (RJ-45 for daisy chain connection)

< 1.4 > EC Box Level Setting

Steps :

- Only **Master EC Box** built-in IP remote access module.
- **Master EC Box** MUST be set on the 1st daisy chain level according to the table below.
- For the 2nd - 16th levels (expansion EC box), please make the level setting according to the table below.
- For the cabling connection, please refer to the next page.



Daisy chain level setting

Using the dip switch no. 1, 2, 3, & 4 to setup each EC box level level as below :

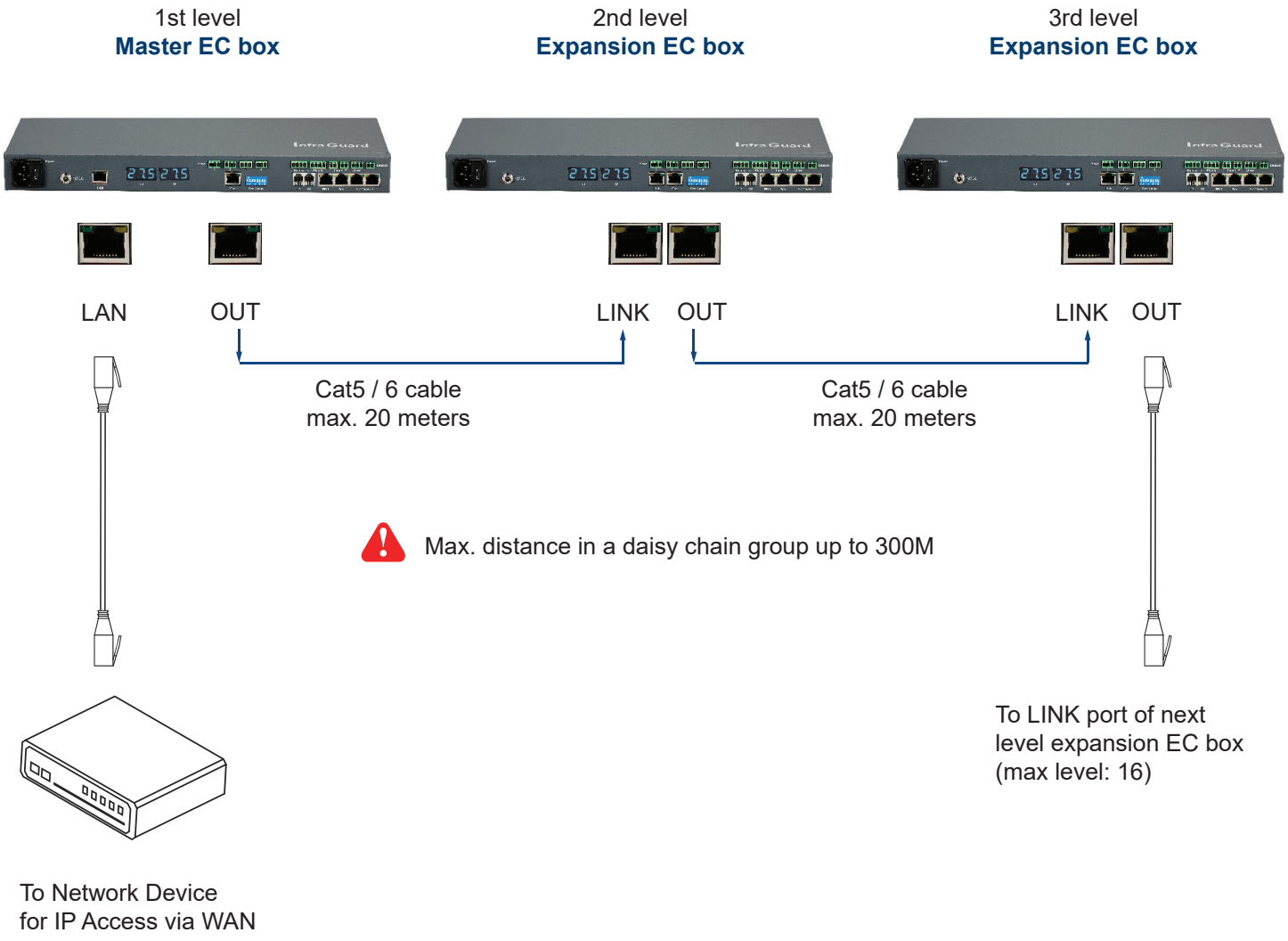
Cascaded EC boxes	Dip switch no.							
	1	2	3	4	5	6	7	8
1st level **Master** EC box	On	On	On	On	Off	Off	Off	Off
2nd level Expansion EC box	Off	On	On	On	Off	Off	Off	Off
3rd level Expansion EC box	On	Off	On	On	Off	Off	Off	Off
4th level Expansion EC box	Off	Off	On	On	Off	Off	Off	Off
5th level Expansion EC box	On	On	Off	On	Off	Off	Off	Off
6th level Expansion EC box	Off	On	Off	On	Off	Off	Off	Off
7th level Expansion EC box	On	Off	Off	On	Off	Off	Off	Off
8th level Expansion EC box	Off	Off	Off	On	Off	Off	Off	Off
9th level Expansion EC box	On	On	On	Off	Off	Off	Off	Off
10th level Expansion EC box	Off	On	On	Off	Off	Off	Off	Off
11th level Expansion EC box	On	Off	On	Off	Off	Off	Off	Off
12th level Expansion EC box	Off	Off	On	Off	Off	Off	Off	Off
13th level Expansion EC box	On	On	Off	Off	Off	Off	Off	Off
14th level Expansion EC box	Off	On	Off	Off	Off	Off	Off	Off
15th level Expansion EC box	On	Off	Off	Off	Off	Off	Off	Off
16th level Expansion EC box	Off	Off	Off	Off	Off	Off	Off	Off

**** No. 5, 6, 7 & 8 dip switch reserved**

< 1.5 > EC Box Daisy Chain

Remarks :

- Each Master IP group supports 16 daisy chain levels.
- The 1st level EC box must be **Master EC box.**
- 1 x Master EC box allows access to 16 levels.
- For remote access of EC boxes, simply connect 1 x Master EC box.
- The 2nd - 16th level EC boxes must be expansion EC box.



< Part II > Software

< 2.1 > Key Features

InfraGuard GMS-02-S is a FREE built-in GUI of each Master EC Box to remotely monitor the connected Expansion EC Box (max. up to 16 EC box levels)

Each EC box can connect a variety of sensors to provide an environmental monitoring solution to secure high levels of data center operational stability and flexibility.

InfraGuard GMS-02-S		
Capacity	Master IP Group (Just 1 IP for 16 EC box levels)	1
	EC box number	16
	Concurrent user	1
Device Overview	Status of Sensor, PDU & Door	✔
	Audio and Visual Output Setting of Sensor	✔
Sensor Peripherals	Status Monitoring	✔
	Location of Sensor / Peripherals	✔
	Temp-Humid Alarm / Rising Alert Threshold Setting	✔
PDU	Energy Consumption kWh / Amp Monitoring	✔
	Outlet Level Measurement	✔
	Outlet Switch ON / OFF	✔
	Amp Alarm Threshold Setting	✔
	Amp Rising / Low Alert Threshold Setting	✔
	Temp-Humid / Circuit Breaker Monitoring	✔

< 2.2 > Master IP Configuration

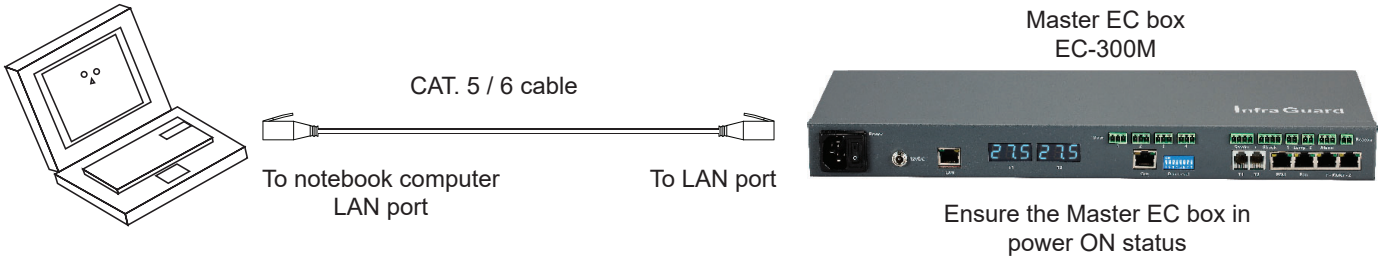
Please take the following steps to configure the Master EC box.

Step 1. Click the following link to go to the mangement software download page :
https://www.austin-hughes.com/resource_cat/product-resources/rack-sensor-resources/#tab-product-series-resources-table-software

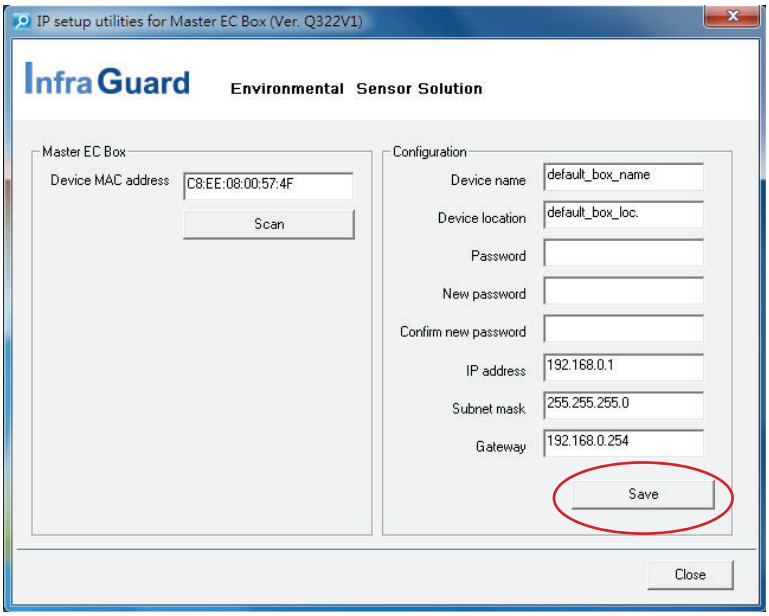
Step 2. Select the IP Setup Utilities of the Master EC Box to download

Step 3. Double Click the MasterIPsetup.msi and follow the instruction to complete the installation

Step 4. Go to each Master EC box with the notebook computer & a piece of CAT. 5 / 6 cable to set up the IP configuration by IP setup utilities as below. Please take the procedures for all Master EC box **ONE BY ONE**



Reconnect the Master EC box with the network device (router or hub), after finish master IP configuration.



1. Write down the new IP address & password for login purpose, refer to < 2.2 >, < 2.3 >, < 2.4 > & < 2.5 >
2. Device name NOT EQUAL to login name of GMS-02-S WEBUI. To change login name, pls refer to P.20 < Login >.

Step 5. Click " **Scan** " to search the Master EC box
Step 6. Enter device name in " **Device name** " (min. 4 char. / max. 16 char.). Default is " **default_box_name** "
Step 7. Enter device location in " **Device location** " (min. 4 char. / max. 16 char.). Default is " **default_box_loc.** "
Step 8. Enter password in " **Password** " for authentication (min. 8 char. / max. 16 char.). Default is " **00000000** "
Step 9. Enter new password in " **New password** " (min. 8 char. / max. 16 char.).
Step 10. Re-enter new password in " **Confirm new password** "
Step 11. Change the desired " **IP address** " / " **Subnet mask** " / " **Gateway** ", then Click " **Save** " to confirm the changes

The default IP setting is as below:

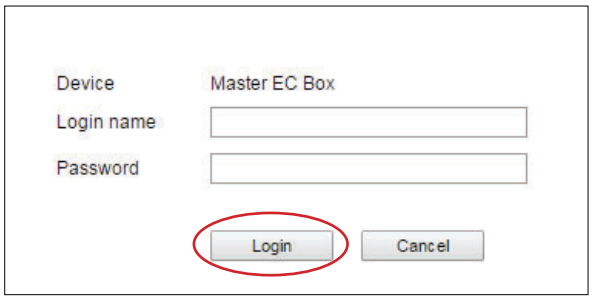
IP address:	192.168.0.1
Subnet mask:	255.255.255.0
Gateway:	192.168.0.254

< 2.3 > GMS-02-S Master EC Box GUI

Each Master EC Box provides a **FREE** built-in GUI, GMS-02-S, which allow user, via a web browser, to monitor the sensor status of each EC box over a TCP/IP Ethernet network.

Each web browser window supports only one Master EC box. If you install more Master EC box, multi windows will be required.

GMS-02-S is a management software with very limited features. You can use more advanced software, InfraGuard Manager IGM-03 .



Step 1. Open Internet Explorer (I.E.), version 11.0

Step 2. Enter the configured IP address of the Master EC box into the I.E. address bar

(Please refer to < 2.2 > Master IP Configuration)

Default IP address is " 192.168.0.1 "

Step 3. Enter " **Login name** " , " **Password** " & Click " **Login** "

Default Login name : 00000000

Password : the one you set in Step. 7 of <2.2> Master IP Configuration

< 2.3 > GMS-02-S Master EC Box GUI

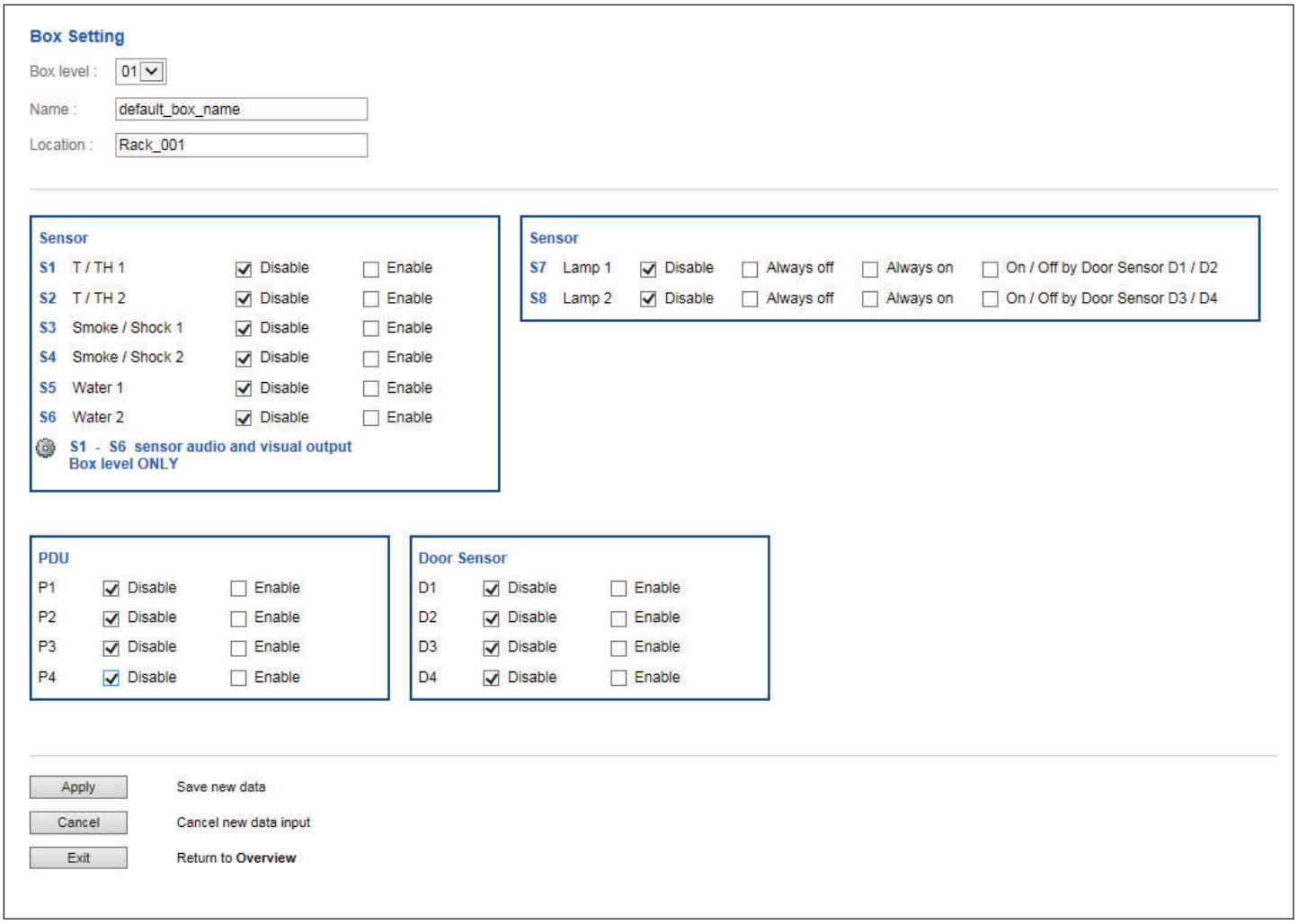
In < **EC Box Overview** >,

- Click " **Search** " to search all the cascaded EC Boxes
- View status of sensors, PDUs and doors connected to the EC Boxes

< 2.3 > GMS-02-S Master EC Box GUI

In **< Box Setting >**,

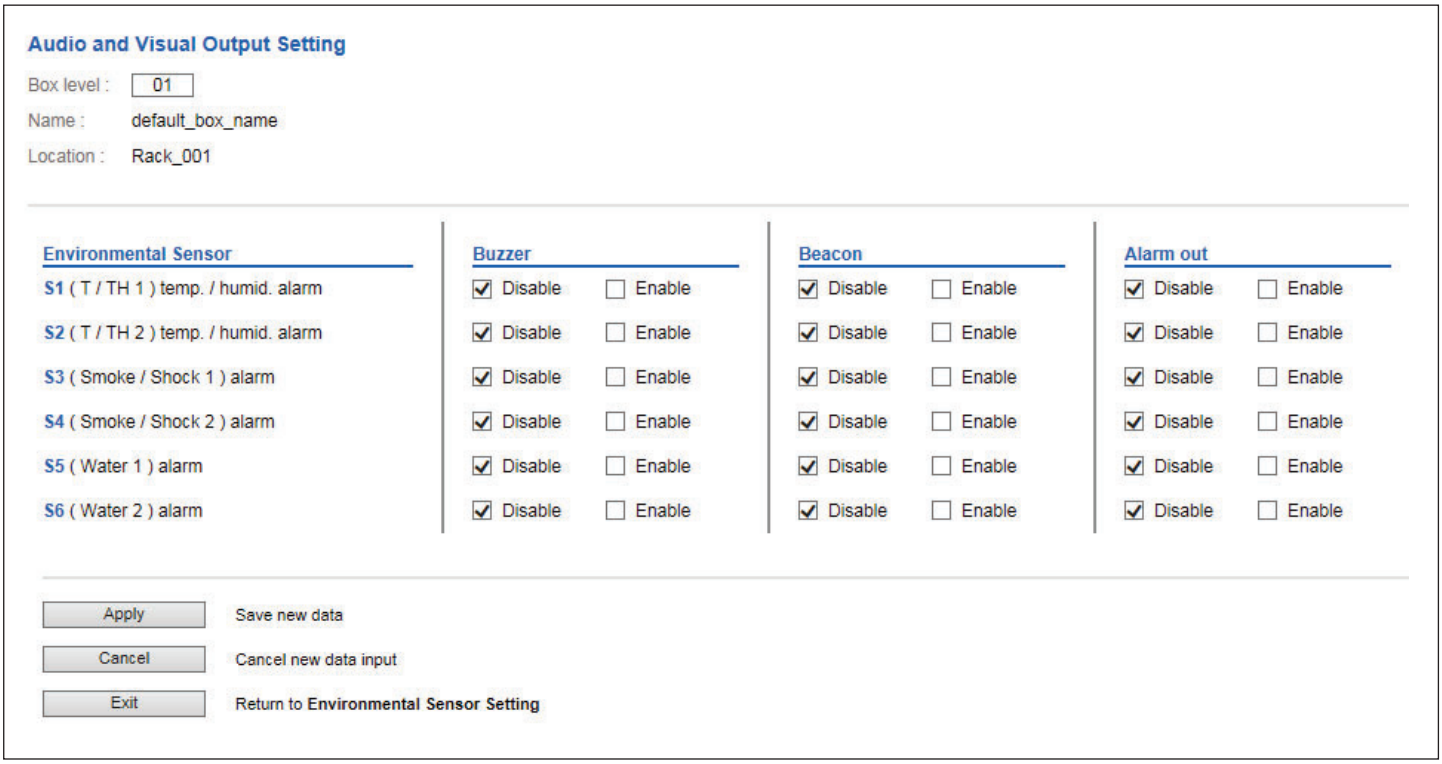
- Default Sensor setting: Disable
- Default PDU setting: Disable
- Default Door Sensor setting: Disable
- Enable Sensor / PDU / Door sensor ONLY when they are connected
- Click " **Apply** " to finish the above settings



< 2.3 > GMS-02-S Master EC Box GUI

In < **Audio & Visual Output Setting** >,

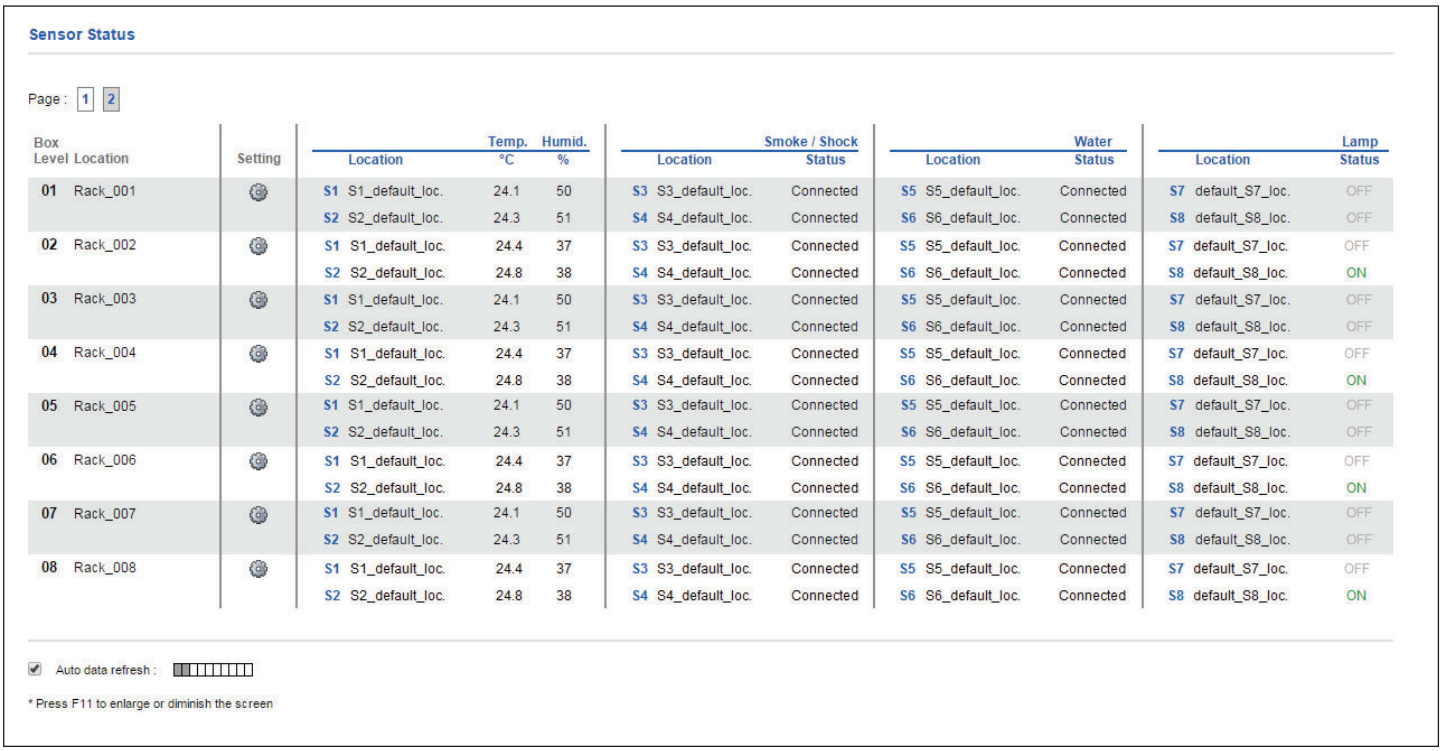
- Default Buzzer / Beacon / Alarm out setting : Disable
- Enable buzzer / beacon / alarm out
- Click " **Apply** " to finish the above settings



< 2.3 > GMS-02-S Master EC Box GUI

In < **Sensor Status** >,

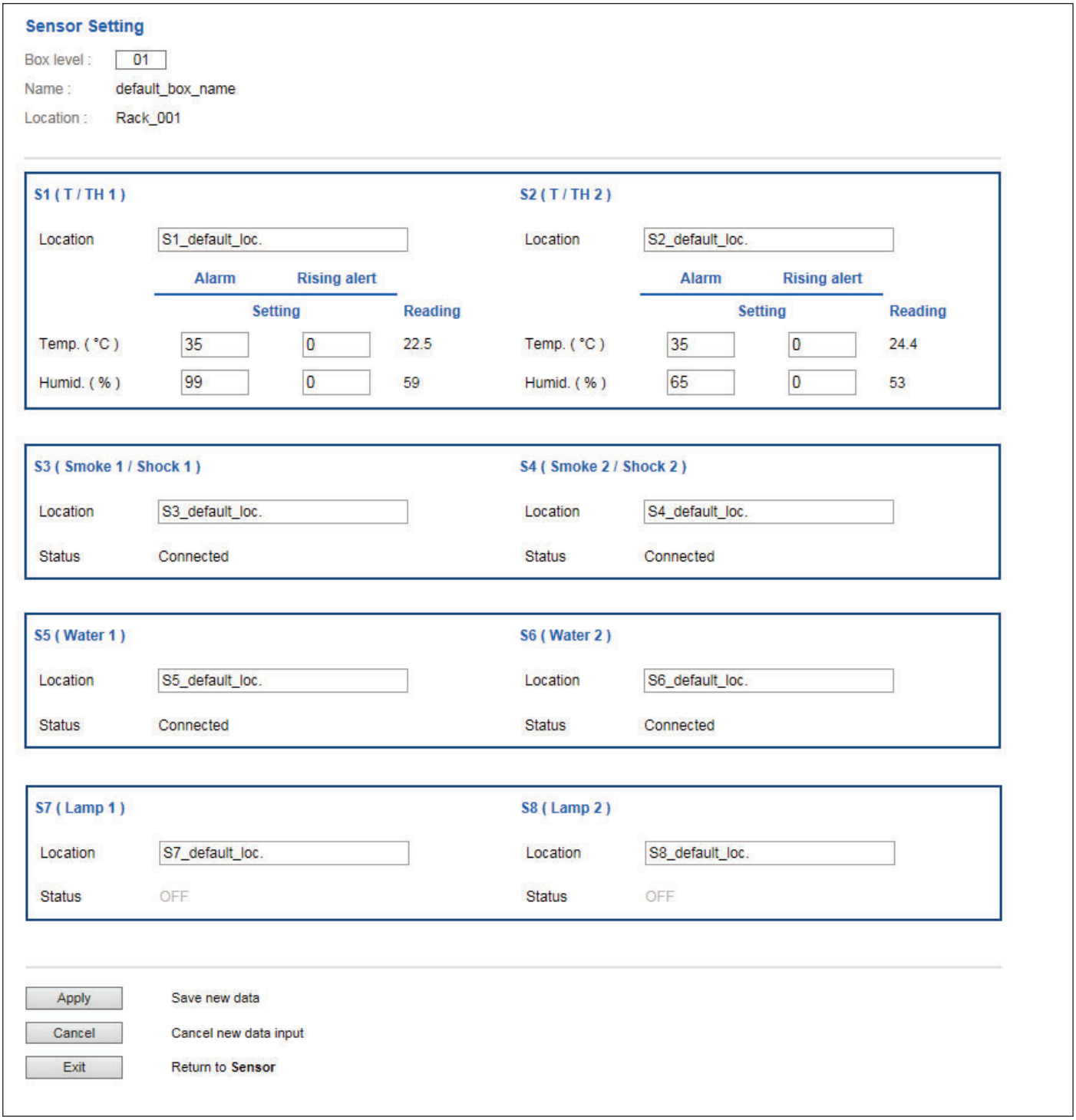
- View location and status of sensor / LED light bar



< 2.3 > GMS-02-S Master EC Box GUI

In < **Sensor Setting** >,

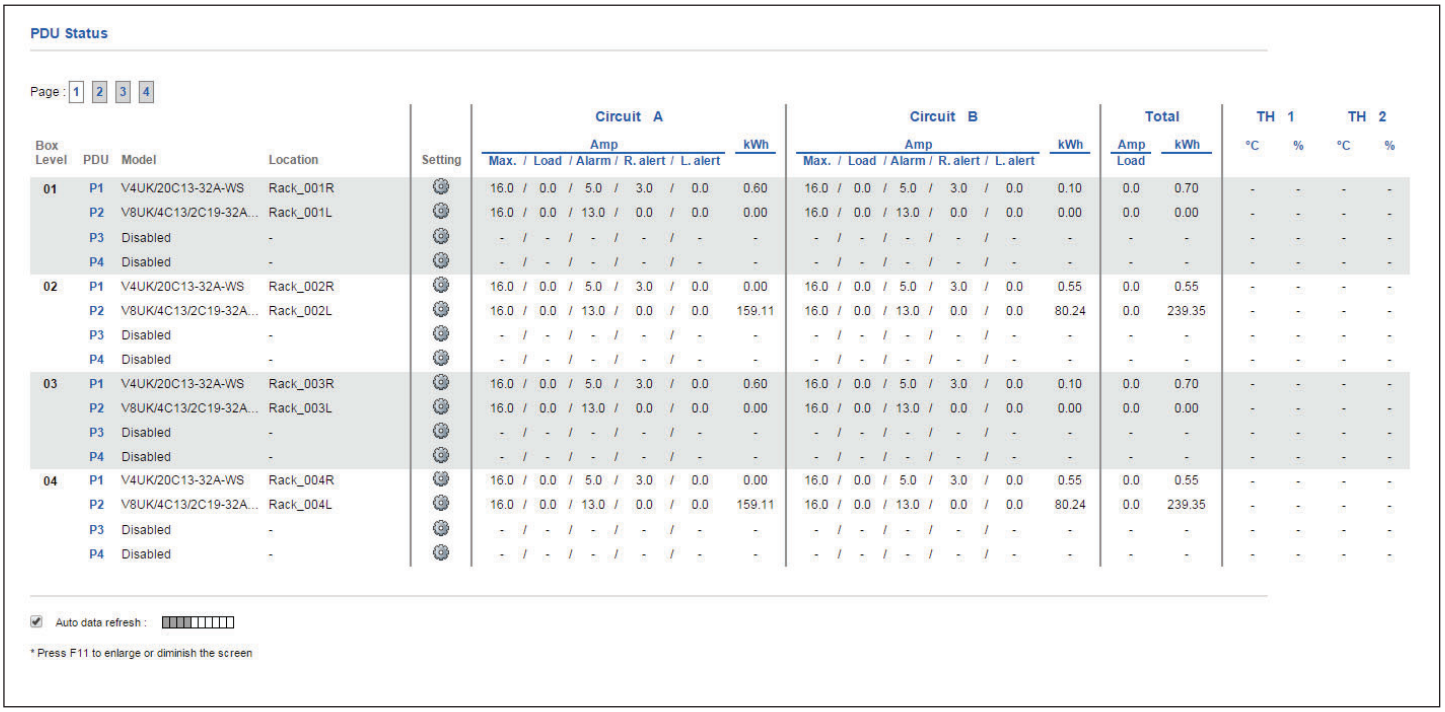
- Change " **Location** ", " **Temp. Alarm & Rising alert setting** " and " **Humid Alarm & Rising alert setting** " of TH sensor
- Change " **Location** " of Smoke / Shock sensor
- Change " **Location** " of Water sensor
- Change " **Location** " of LED light bar
- Click " **Apply** " to change the above settings



< 2.3 > GMS-02-S Master EC Box GUI

In < **PDU Status** >,

- View all installed PDUs' status
- View latest loading on each PDU's circuits
- View aggregate current & energy consumption on each PDU
- View status & latest reading of Temp. & TH sensors connected to each PDU



PDU Status

Page : 1 2 3 4

Box Level	PDU	Model	Location	Setting	Circuit A Amp Max. / Load / Alarm / R. alert / L. alert	Circuit A kWh	Circuit B Amp Max. / Load / Alarm / R. alert / L. alert	Circuit B kWh	Total Amp Load	Total kWh	TH 1 °C	TH 1 %	TH 2 °C	TH 2 %
01	P1	V4UK/20C13-32A-WS	Rack_001R		16.0 / 0.0 / 5.0 / 3.0 / 0.0	0.60	16.0 / 0.0 / 5.0 / 3.0 / 0.0	0.10	0.0	0.70	-	-	-	-
	P2	V8UK/4C13/2C19-32A...	Rack_001L		16.0 / 0.0 / 13.0 / 0.0 / 0.0	0.00	16.0 / 0.0 / 13.0 / 0.0 / 0.0	0.00	0.0	0.00	-	-	-	-
	P3	Disabled	-		- / - / - / - / -	-	- / - / - / - / -	-	-	-	-	-	-	-
	P4	Disabled	-		- / - / - / - / -	-	- / - / - / - / -	-	-	-	-	-	-	-
02	P1	V4UK/20C13-32A-WS	Rack_002R		16.0 / 0.0 / 5.0 / 3.0 / 0.0	0.00	16.0 / 0.0 / 5.0 / 3.0 / 0.0	0.55	0.0	0.55	-	-	-	-
	P2	V8UK/4C13/2C19-32A...	Rack_002L		16.0 / 0.0 / 13.0 / 0.0 / 0.0	159.11	16.0 / 0.0 / 13.0 / 0.0 / 0.0	80.24	0.0	239.35	-	-	-	-
	P3	Disabled	-		- / - / - / - / -	-	- / - / - / - / -	-	-	-	-	-	-	-
	P4	Disabled	-		- / - / - / - / -	-	- / - / - / - / -	-	-	-	-	-	-	-
03	P1	V4UK/20C13-32A-WS	Rack_003R		16.0 / 0.0 / 5.0 / 3.0 / 0.0	0.60	16.0 / 0.0 / 5.0 / 3.0 / 0.0	0.10	0.0	0.70	-	-	-	-
	P2	V8UK/4C13/2C19-32A...	Rack_003L		16.0 / 0.0 / 13.0 / 0.0 / 0.0	0.00	16.0 / 0.0 / 13.0 / 0.0 / 0.0	0.00	0.0	0.00	-	-	-	-
	P3	Disabled	-		- / - / - / - / -	-	- / - / - / - / -	-	-	-	-	-	-	-
	P4	Disabled	-		- / - / - / - / -	-	- / - / - / - / -	-	-	-	-	-	-	-
04	P1	V4UK/20C13-32A-WS	Rack_004R		16.0 / 0.0 / 5.0 / 3.0 / 0.0	0.00	16.0 / 0.0 / 5.0 / 3.0 / 0.0	0.55	0.0	0.55	-	-	-	-
	P2	V8UK/4C13/2C19-32A...	Rack_004L		16.0 / 0.0 / 13.0 / 0.0 / 0.0	159.11	16.0 / 0.0 / 13.0 / 0.0 / 0.0	80.24	0.0	239.35	-	-	-	-
	P3	Disabled	-		- / - / - / - / -	-	- / - / - / - / -	-	-	-	-	-	-	-
	P4	Disabled	-		- / - / - / - / -	-	- / - / - / - / -	-	-	-	-	-	-	-

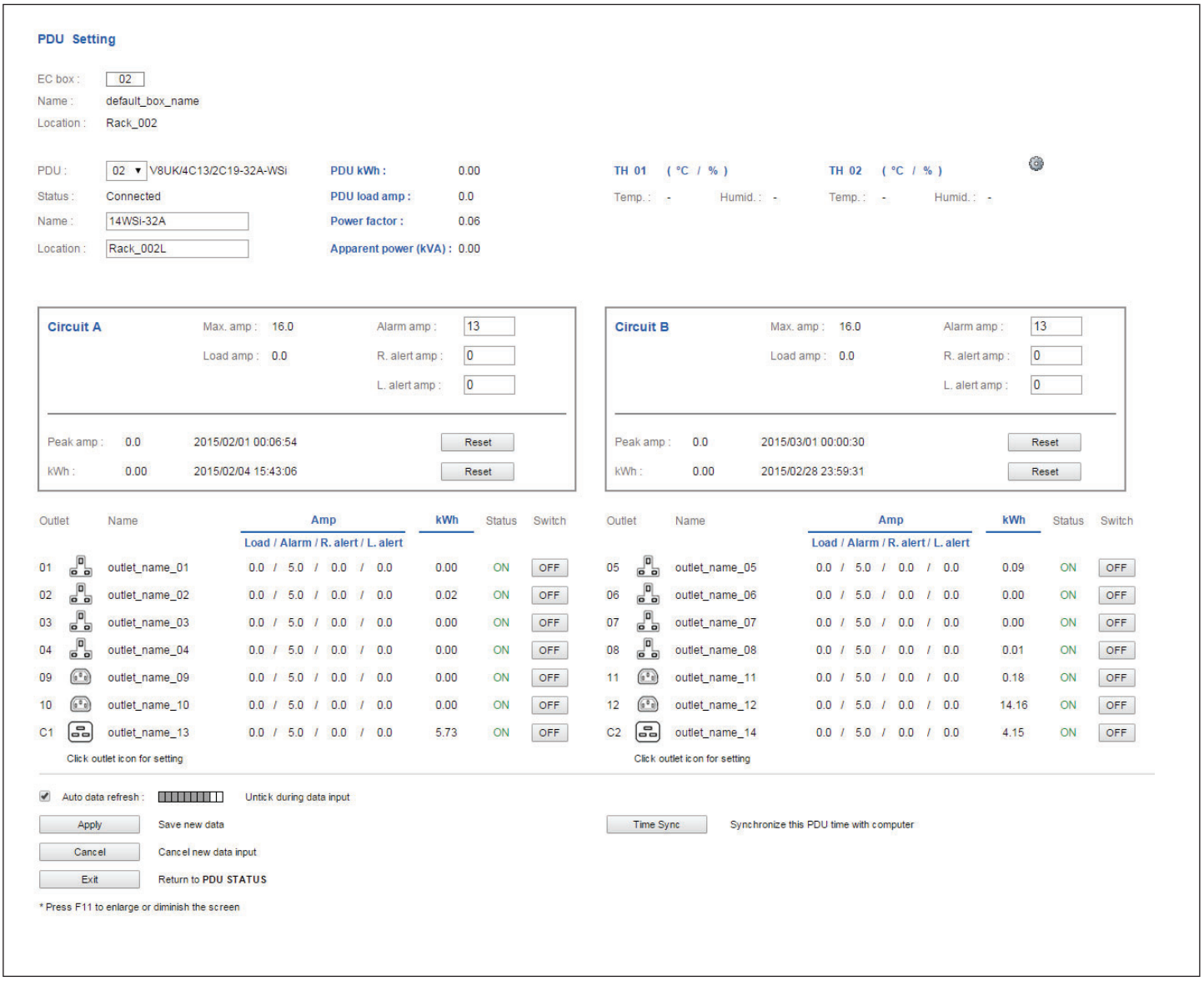
Auto data refresh :

* Press F11 to enlarge or diminish the screen

< 2.3 > GMS-02-S Master EC Box GUI

In < **PDU Setting** >,

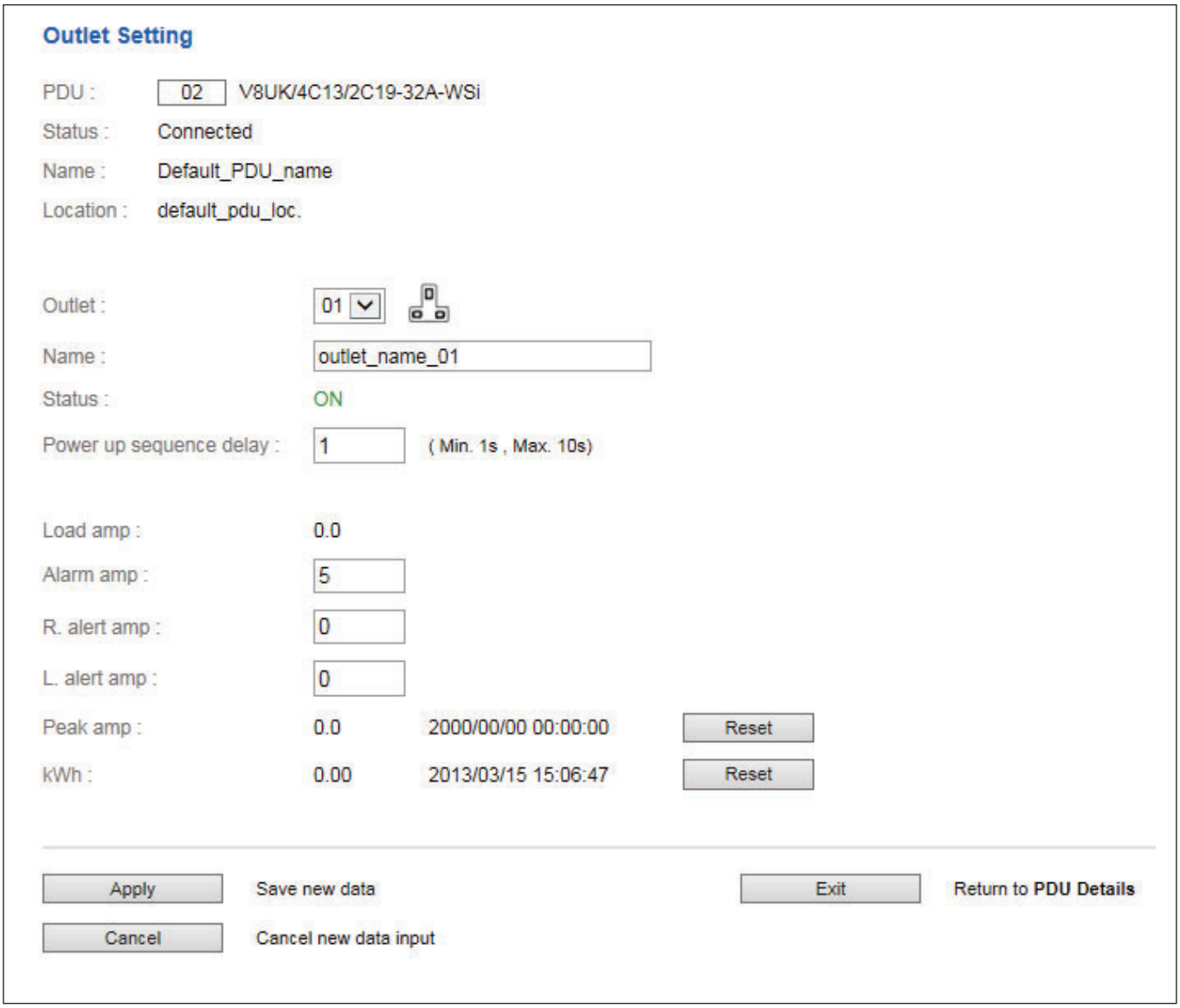
- Change " **Name** " and " **Location** " of PDU & Click " **Apply** "
- Change " **Alarm amp.** " , " **R. alert amp.** " and " **L. alert amp.** " & Click " **Apply** "
- Click " **Reset** " to reset peak amp. and kWh of PDU's circuits if necessary
- Click " **ON / OFF** " to switch ON / OFF outlet (Switched PDU only)
- View ON / OFF status of each PDU's outlet
- View aggregated current on the PDU
- View latest loading & energy consumption of each PDU outlet (Outlet Measurement PDU only)
- View the latest T/H reading connected to the PDU



< 2.3 > GMS-02-S Master EC Box GUI

In < **Outlet Setting** >,
- Change PDU's outlet name
- Change " **Power up sequence delay** " of PDU's outlet (Switched PDU only)
- Change " **Alarm amp.** " , " **R. alert amp.** " & " **R. alert amp.** " of PDU's outlet (Outlet Measurement PDU only)

- Click " **Apply** " to finish the above settings
- Click " **Reset** " to reset peak amp. and kWh of PDU's outlet if necessary (Outlet Measurement PDU only)



< 2.3 > GMS-02-S Master EC Box GUI

In < **TH setting** >,

- Default TH setting: Deactivate
- " **Activate** " Temp. & Humid sensors ONLY when they are connected
- Change " **Location** ", " **Alarm setting** " & " **Rising alert setting** " of Temp. & Humid sensors
- Click " **Apply** " to finish the above settings

< 2.3 > GMS-02-S Master EC Box GUI

In < **Door Status** >,

- View the door sensor status

Door Status

Box Level	Location	Setting	D1 Location	D1 Status	D2 Location	D2 Status	D3 Location	D3 Status	D4 Location	D4 Status
01	Rack_001		D1_default_loc	Closed	D2_default_loc	Closed	D3_default_loc	Closed	D4_default_loc	Closed
02	Rack_002		D1_default_loc.	Closed	D2_default_loc.	Closed	D3_default_loc.	Closed	D4_default_loc.	Opened
03	Rack_003		D1_default_loc	Closed	D2_default_loc	Closed	D3_default_loc	Closed	D4_default_loc	Closed
04	Rack_004		D1_default_loc.	Closed	D2_default_loc.	Closed	D3_default_loc.	Closed	D4_default_loc.	Opened
05	Rack_005		D1_default_loc	Closed	D2_default_loc	Closed	D3_default_loc	Closed	D4_default_loc	Closed
06	Rack_006		D1_default_loc.	Closed	D2_default_loc.	Closed	D3_default_loc.	Closed	D4_default_loc.	Opened
07	Rack_007		D1_default_loc	Closed	D2_default_loc	Closed	D3_default_loc	Closed	D4_default_loc	Closed
08	Rack_008		D1_default_loc.	Closed	D2_default_loc.	Closed	D3_default_loc.	Closed	D4_default_loc.	Opened
09	Rack_009		D1_default_loc	Closed	D2_default_loc	Closed	D3_default_loc	Closed	D4_default_loc	Closed
10	Rack_010		D1_default_loc.	Closed	D2_default_loc.	Closed	D3_default_loc.	Closed	D4_default_loc.	Opened
11	Rack_011		D1_default_loc	Closed	D2_default_loc	Closed	D3_default_loc	Closed	D4_default_loc	Closed
12	Rack_012		D1_default_loc.	Closed	D2_default_loc.	Closed	D3_default_loc.	Closed	D4_default_loc.	Opened
13	Rack_013		D1_default_loc	Closed	D2_default_loc	Closed	D3_default_loc	Closed	D4_default_loc	Closed
14	Rack_014		D1_default_loc.	Closed	D2_default_loc.	Closed	D3_default_loc.	Closed	D4_default_loc.	Opened
15	Rack_015		D1_default_loc	Closed	D2_default_loc	Closed	D3_default_loc	Closed	D4_default_loc	Closed
16	Rack_016		D1_default_loc.	Closed	D2_default_loc.	Closed	D3_default_loc.	Closed	D4_default_loc.	Opened

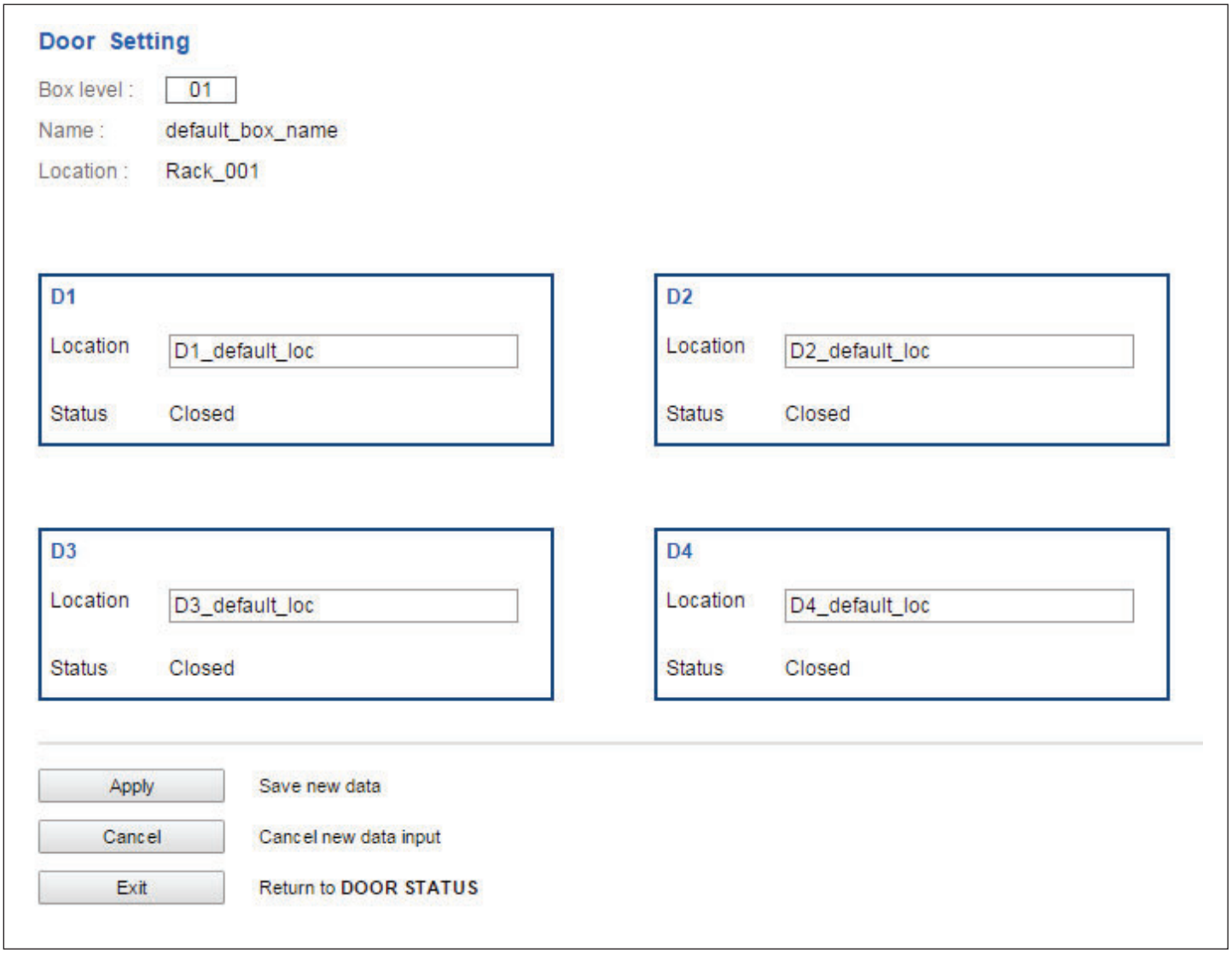
Auto data refresh :

* Press F11 to enlarge or diminish the screen

< 2.3 > GMS-02-S Master EC Box GUI

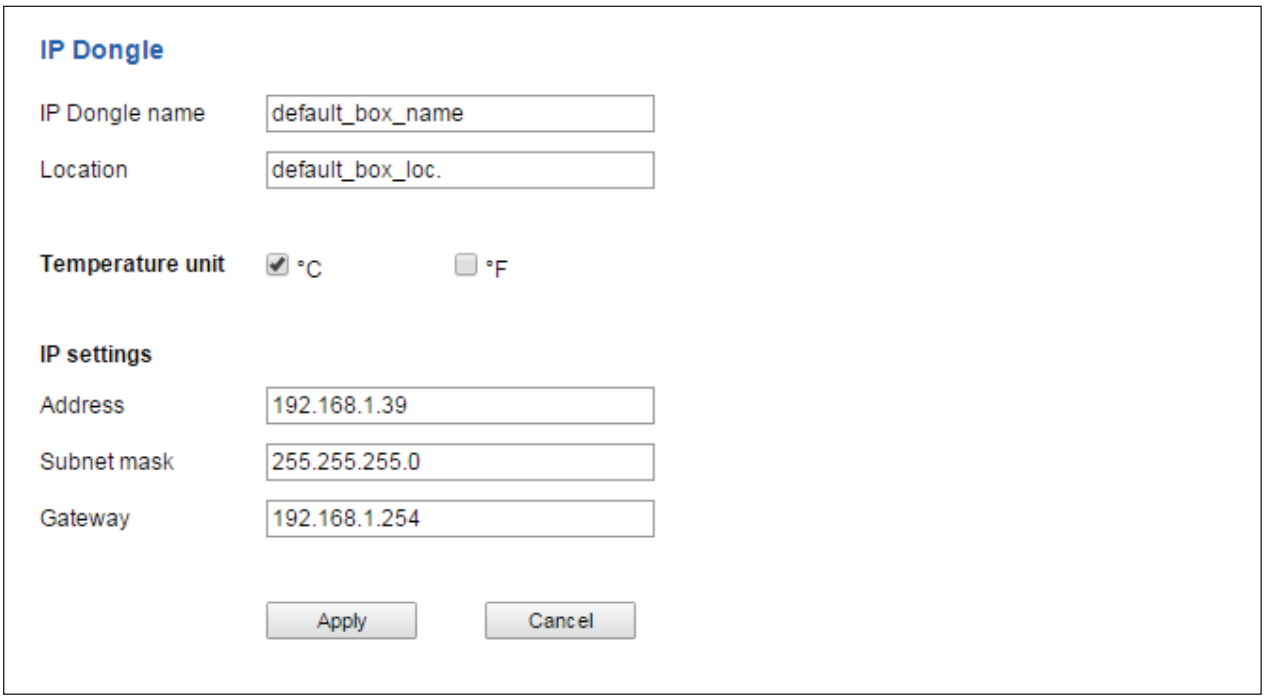
In < **Door Setting** >,

- Change the " **Location** " of door sensor
- Click " **Apply** " to finish the above settings



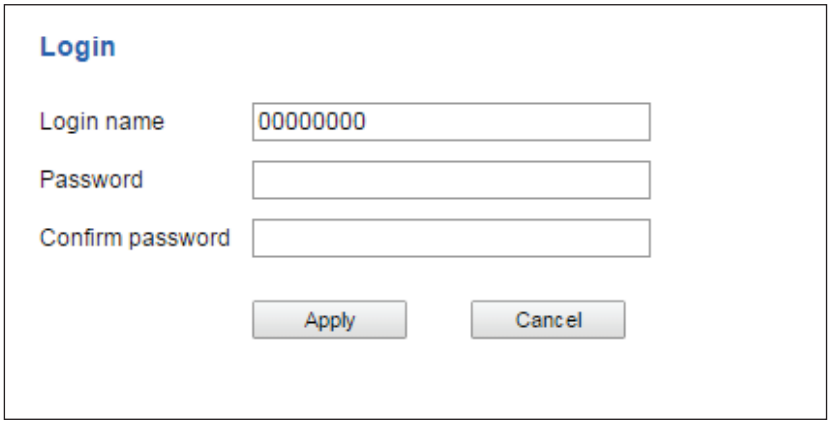
< 2.3 > GMS-02-S Master EC Box GUI

In < **System** >,
- Change the " **IP Dongle name** " & " **Location** " of the Master EC Box
- Change " **Temp. unit** " displays in the UI (Default : C)
- Change the " **IP address** ", " **Subnet mas**k " & " **Gateway** " of the Master EC Box
- Click " **Apply** " to finish the above settings



< 2.3 > GMS-02-S Master EC Box GUI

In < **Login** >,
- Default Login name : 00000000
- Default Password: 00000000
- To change login name:
  - Input a new login name in “ **Login name** “
  - Input the default password in “ **Password** “
  - Input the default password in “ **Confirm password** “
  - Click “ **Apply** “ to finish the above settings
- To change password:
  - Input the login name in “ **Login name** “
  - Input a new password in “ **Password** “
  - Input the new password in “ **Confirm password** “
- Click “ **Apply** “ to finish the above settings



< 2.4 > SNMP Setup

The EC-300M master box can manage the connected EC-300 expansion box in a single daisy-chain up to 16 levels via SNMP v2c (Simple Network Management Protocol).

Only EC-300M master box can support SNMP.

(I). Accessing MIB Files

Step 1. Click the following link to go to the mangement software download page :
https://www.austin-hughes.com/resource_cat/product-resources/rack-sensor-resources/#tab-product-series-resources-table-software

Step 2. Select the appropriate MIB file of the EC-300M master box to download

(II). Enabling SNMP Support

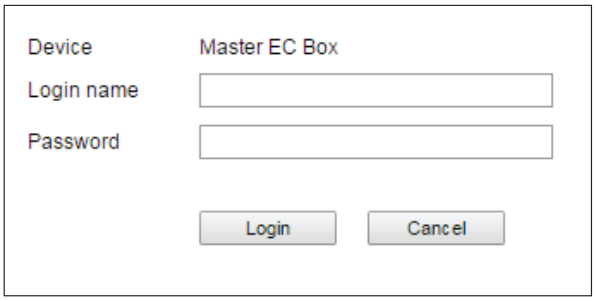
Please take the following steps to enable SNMP function of the EC-300M master box

Step 1. Connect the EC-300M master box to a computer.

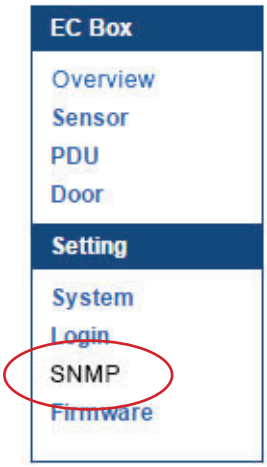
Step 2. Open the Internet Explorer (I.E.) version 11.0

Step 3. Enter the configured IP address of EC-300M master box into the I.E. address bar.
Default IP address is " **192.168.0.1** "

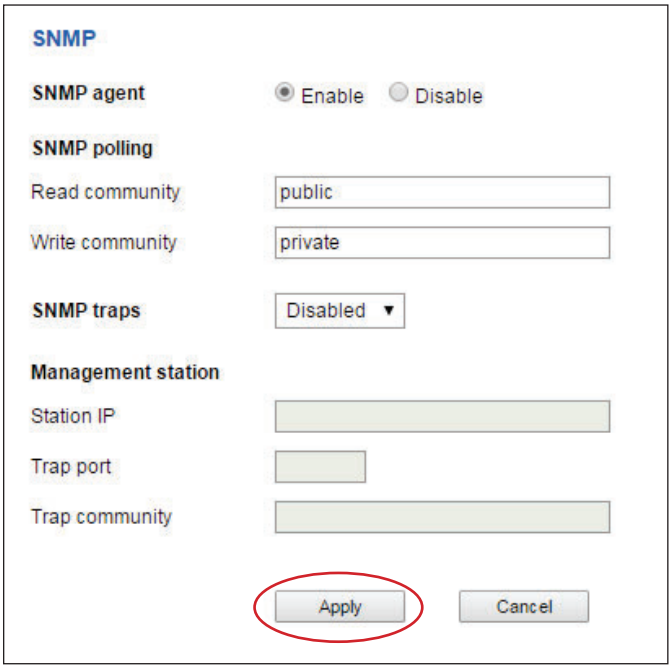
Step 4. Input " **Login name** " & " **Password** "
Default Login name : 00000000
Password : the one you set in Step. 7 of <2.2> Master IP Configuration



Step 5. Select SNMP from the left navigation pane



Step 6. The SNMP Settings window appears as below:



Step 7. Click " **Enable** " in " **SNMP Agent** " to start the SNMP agent service

Step 8. Input " **Read Community** ". Default is " **public** "

Step 9. Input " **Write Community** ". Default is " **private** "

Step 10. Select " **disabled** " or " **V2Trap** " in " **SNMP Traps** "

If select " **V2Trap** " , please input IP address of the SNMP management station in " **Station IP:** "

Step 11. Click " **Apply** " to finish the SNMP settings

< 2.5 > Master EC Box Firmware Upgrade

< Firmware Upgrade >

For Function enhancement of EC-300M master box, please take the following steps to remotely upgrade the EC-300M master box firmware.

Step 1. Click the following link to go to the Management software download page :
https://www.austin-hughes.com/resource_cat/product-resources/rack-sensor-resources/#tab-product-series-resources-table-software

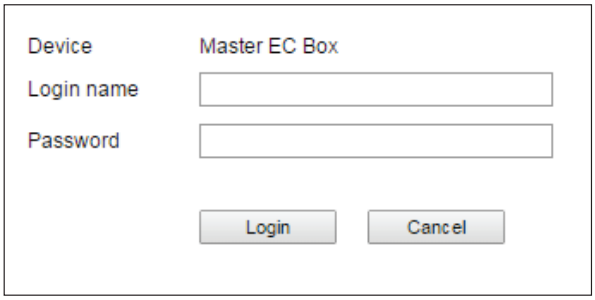
Step 2. Select the appropriate firmware file of the EC-300M master box to download

Step 3. Connect the EC-300M master box to the computer.

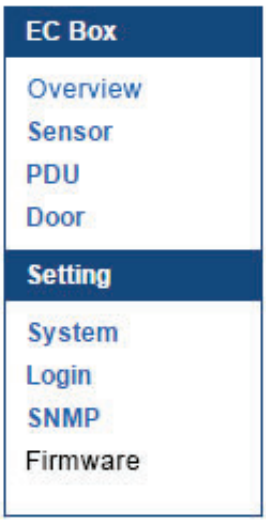
Step 4. Open the Internet Explorer (I.E.) version 11.0

Step 5. Enter the configured EC-300M master box address into the I.E. address bar.
Default IP address is " **192.168.0.1** "

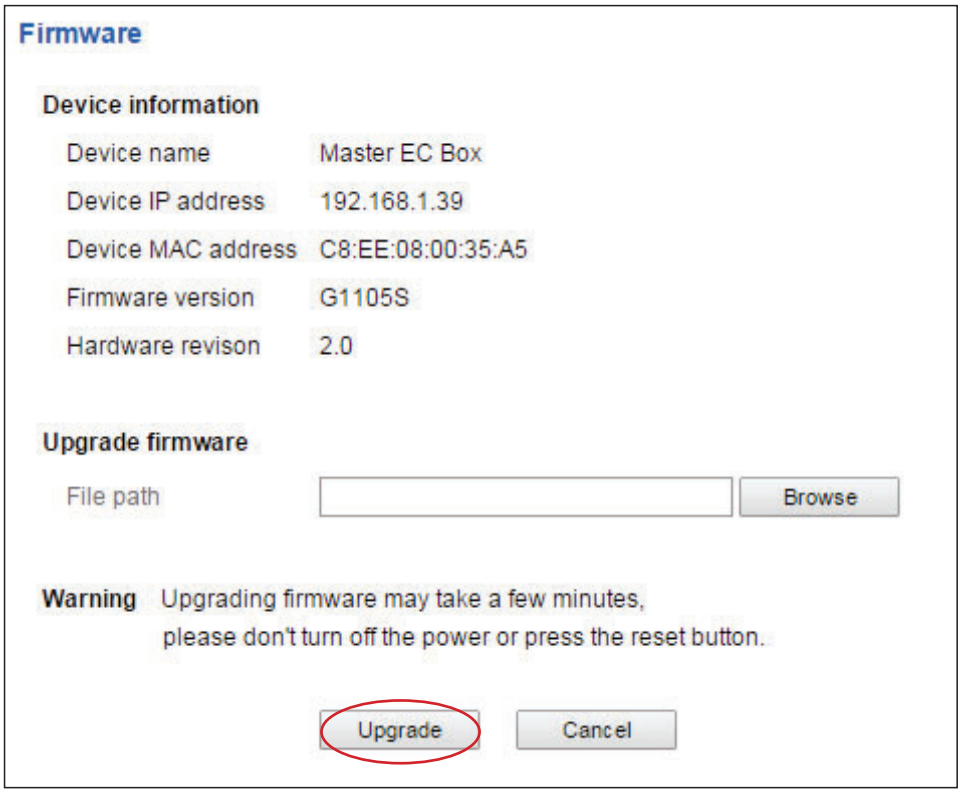
Step 6. Enter " **Login name** " & " **Password** ".
Default Login name : 00000000
Password : the one you set in Step. 7 of <2.2> Master IP Configuration



Step 7. Select the Firmware from the left navigation pane



Step 8. The firmware window appears as below :



Step 9. Click " **Browse** " and select the firmware file (xxx.enc) from the specific path in the pop up window and Click " **Open** "

Step 10. Click " **Upgrade** " to start the upgrade process. It takes a few minutes to complete.

Step 11. Once complete , the UI will return to the login page