G7 Wireless Sensor System

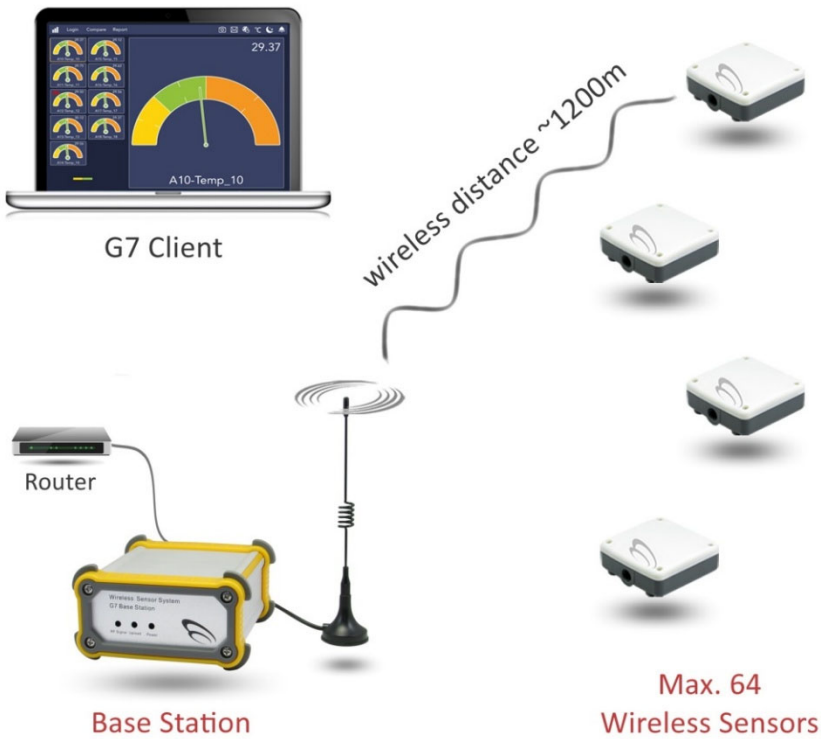
Technical Guide

Installation, Setup & Centre Software

[Hardware Version V1.2.2 / V2.2.2]

- G7-BS Base Station (V1.2.2 & V2.2.2)

- G7-T2/TX wireless temperature sensor
- G7-S2/H2/H3 wireless temperature humidity sensor
- G7-DT wireless dual temperature sensor
- G7-HA wireless high precision temperature humidity sensor
- G7-AD wireless analog sensor
- G7-D2 wireless digital alarm input
- G7-LK wireless water leak detector
- G7-TP wireless temperature pressure sensor
- G7-MS wireless Modbus sensor



Revision 250422 [V2.2.2-M]

Contents

Note: G7-BS (V2.3.1) and G7-MB wireless Modbus sensor are not supported in this manual

1. Overview

G7 Wireless Sensor System consists of:

- ❖ Base Station
- ❖ Wireless Sensor

What is included in the package?

Base Station

- External RF Antenna, Ethernet Cable
- USB Adaptor – for configuration of wireless sensor
- 100-230VAC/5VDC Power Adaptor

Wireless Sensor

- G7-T2, G7-H2 Temperature & Humidity Sensor Probe
  - ❖ Temperature or Humidity Sensor probe factory pre-installed
- G7-DT Dual Temperature Sensor Probe
  - ❖ 2 x Temperature Sensor probe factory pre-installed
- G7-HA High Precision Temperature & Humidity Sensor Probe
  - ❖ Temperature or Humidity Sensor probe factory pre-installed
- G7-AD Analog Sensor Probe
  - ❖ Analog Sensor (4-20mA or 0-5VDC)
- G7-D2 Digital Alarm Input
  - ❖ 2 x alarm input (dry contact)
- G7-LK Water Leakage Detector
  - ❖ Water Leakage Detector probe factory pre-installed
- G7-TP Temperature & Pressure Sensor Probe
  - ❖ Temperature and Pressure Sensor probe factory pre-installed
- G7-MS Modbus Sensor or Meter
  - ❖ 2 x Floating Points Modbus Data Registers

Accessories

- RF Antenna (Internal & External)
- Internal Battery (3.6VDC 3400mAh or 14000mAh non-rechargeable)
- Optional Solar Panel (1W solar panel and 3400mAh rechargeable battery)

2. Base Station

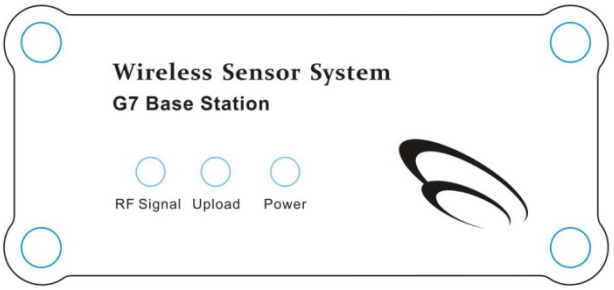
G7 Base Station scans and receives the data from all the wireless sensors within the range. It uploads the temperature reading to central server instantly over the Network or Internet.

- External RF Antenna
- 10/100M Ethernet Port in TCP protocol

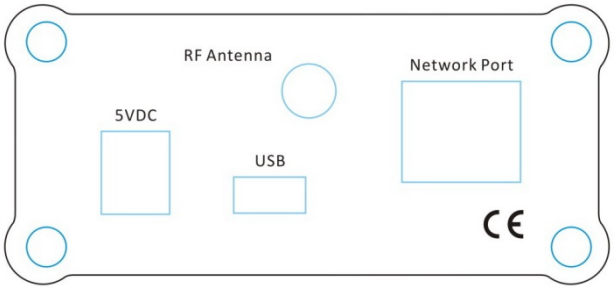
G7-BS (V1.2.2) **G7-BS (V2.2.2)**

V1.2.2	support all wireless sensors except G7-TP, G7-DT, G7-MS and G7-MB
V2.2.2-C/D	support all wireless sensors except G7-DT, G7-MS and G7-MB
V2.2.2-M	support all wireless sensors except G7-MB

Base Station Front Panel



Base Station Back Panel



Power LED: ON

Upload LED:blink when data is uploaded to server over network

RF Signal LED: blink when data is received from wireless sensors

3. Sensor

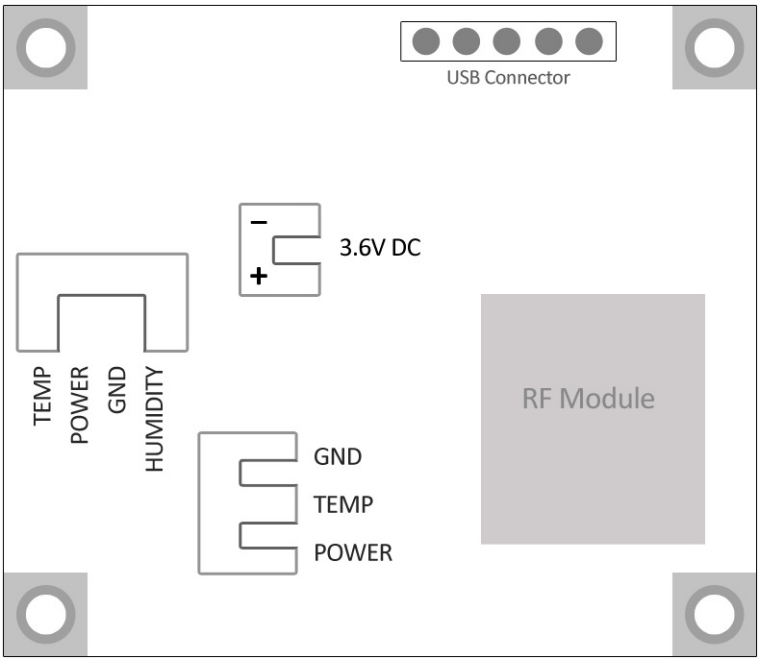
(1) G7-T2/H2 Wireless Temperature & Humidity Sensor

It is integrated with low power RF wireless transmitter. Internal battery supports continuous operation for ~3 years. Its RF module provides a highly reliable data transmission up to 1200m unblocked range for wide applications.

Probe Specification:

- wireless temperature sensor (-55 ~ 125 °C)
- wireless humidity sensor (0-100%RH)
- internal battery – 3400mAh
- internal or external RF antenna
- waterproof case, 80 x 80 x 28 mm

Wiring of G7-T2/H2

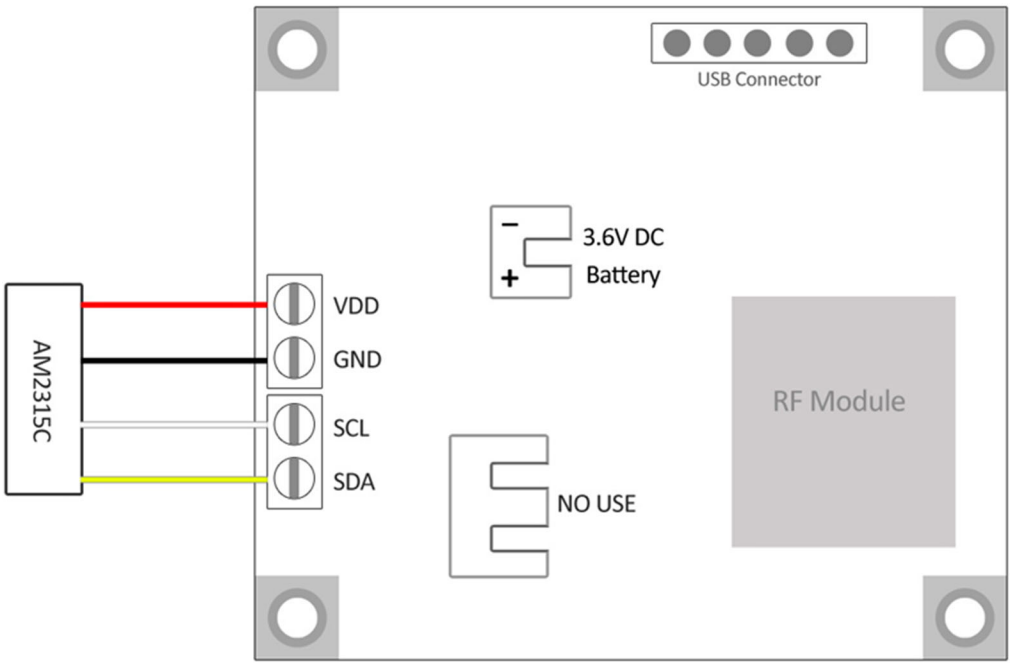


(2) G7-HA Wireless High Precision Temperature & Humidity Sensor

G7-HA is an industrial grade temperature and humidity sensor.
It is powered by 2.5~3.6V battery.

Probe AM2315C Specification:

- Temperature Sensor -40 ~ 80 °C (+/- 0.3°C)
- Humidity Sensor 0 ~ 100%RH (+/- 2%RH)

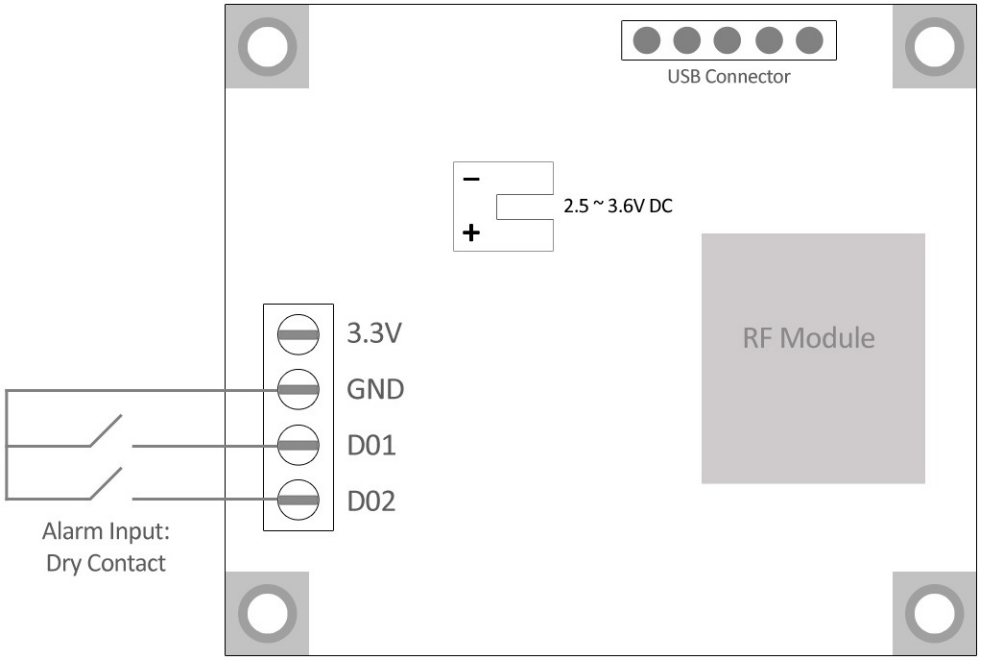


(3) G7-D2 Wireless Digital Alarm Input

G7-D2 provides two channel inputs for digital alarm e.g. smoke detector, gas leakage, level switch.

Digital Alarm Input Specification:

- On/Off Dry Contact
- NO (Normal Open) - Alarm is triggered when dry contact is closed



NOTE:

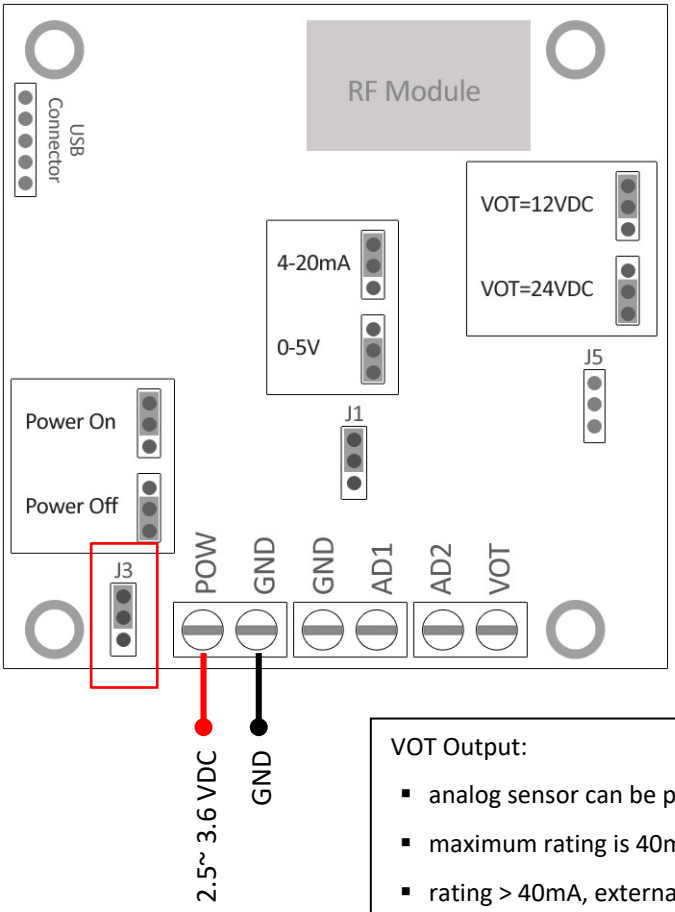
* Both D01 and D02 can be used simultaneously.
* No other sensors e.g. temperature probe should be connected.
* Pin 3.3V should NOT be connected. It is reserved for another version.
* Plug in the battery connector

(4) G7-AD Wireless Analog Sensor [V1.2.5]

G7-AD provides one channel input for analog sensor, and internal power for the sensor.
G7-AD [V1.2.5] is powered by 2.5~3.6V battery.

Probe Specification:

- Analog Sensor (4-20mA or 0-5VDC)
- Max. rating: 40mA (internal power)



POW: external power source 2.5~3.6VDC

GND: ground for power source

GND: ground for analog sensor signal

AD1: 4-20mA analog sensor input

AD2: 0-5VDC analog sensor input

VOT: voltage output for analog sensor

VOT Output:

- analog sensor can be powered by internal voltage output VOT (12 or 24V)
- maximum rating is 40mA
- rating > 40mA, external power source must be used

J1 Select type of input signal : 4~20mA or 0~5V DC
J3 On/Off Power Switch
J5 Select VOT voltage output : 12 or 24V DC

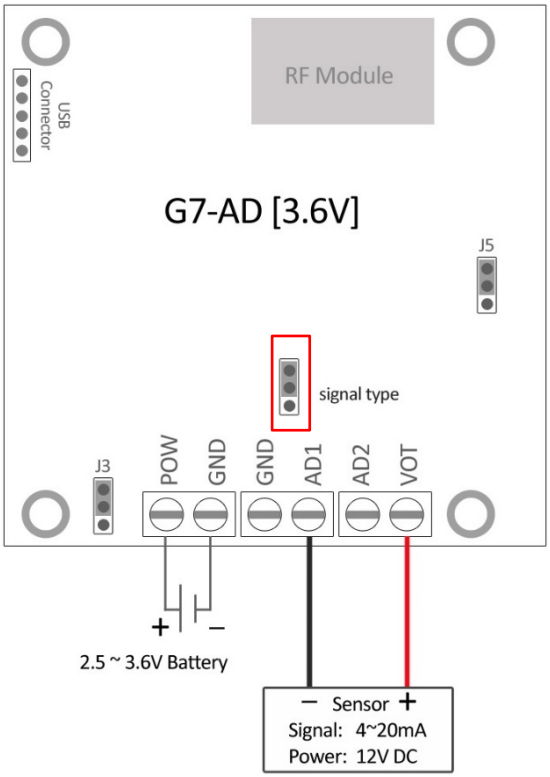
NOTE:

* Either AD1 or AD2 should be used, but NOT both simultaneously.
* Power Off with J3 before jumper J1 or J5 is changed. Otherwise, the board will be damaged by electric charges.

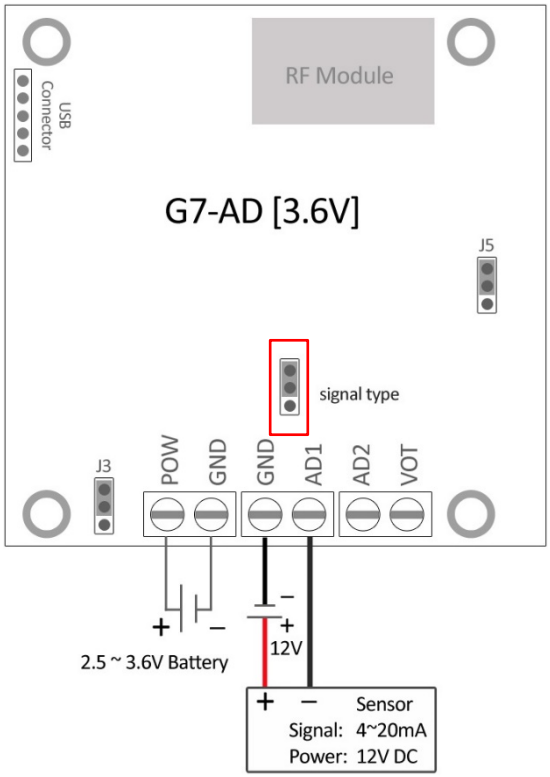
Wiring schematics (G7-AD wireless analog sensor only):

(A) AD01 Channel: Analog Sensor - **Current** Signal Output

Internal Power Source

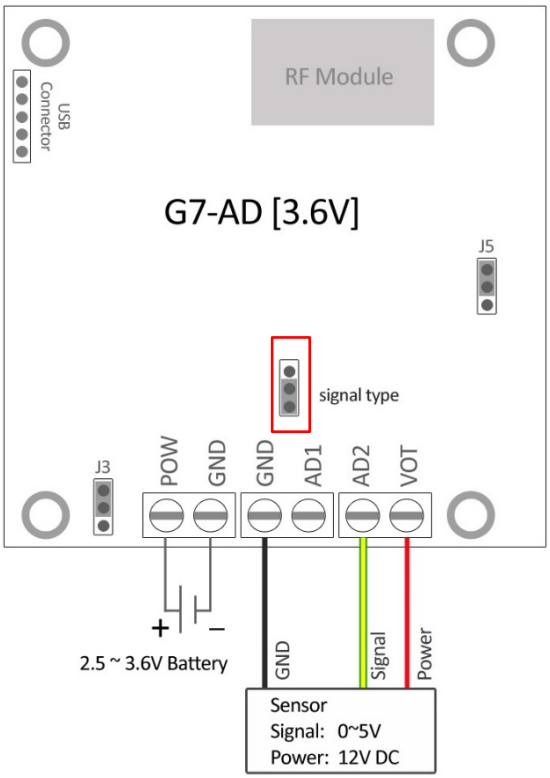


External Power Source

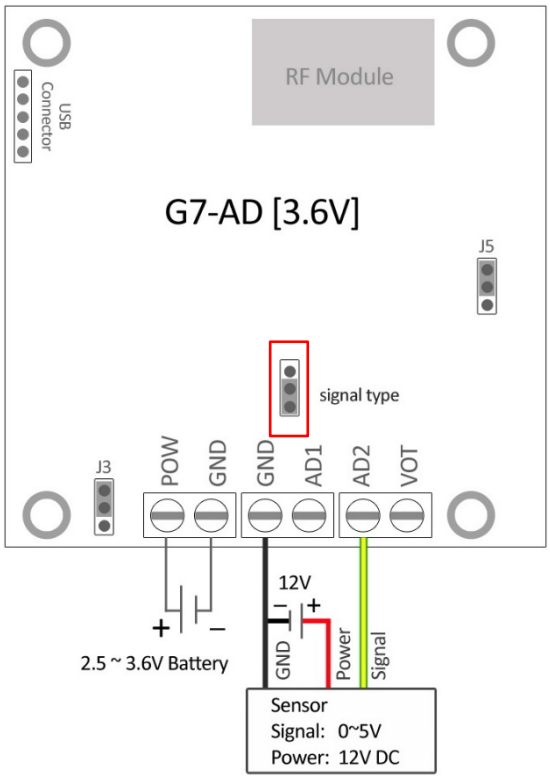


(B) AD02 Channel: Analog Sensor - **Voltage** Signal Output

Internal Power Source



External Power Source

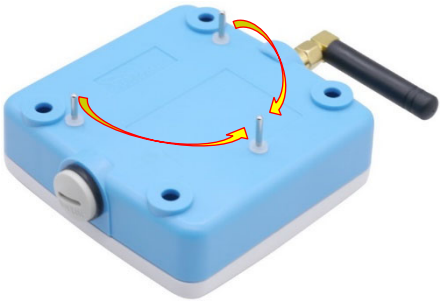


(5) G7-LK Wireless Water Leak Detector

Two options:

* G7-LKC Extension Detection Cable
  Alarm is triggered when water contacts any part of the cable.
  Cable can be extended up to 100m.

* G7-LKP 3-Pin Detector
  Alarm is triggered when water contacts any two pins.

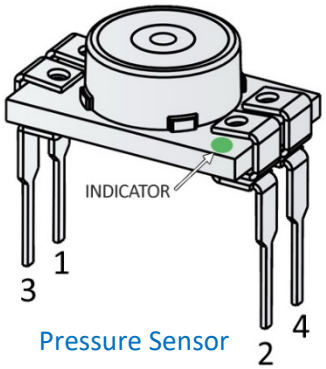


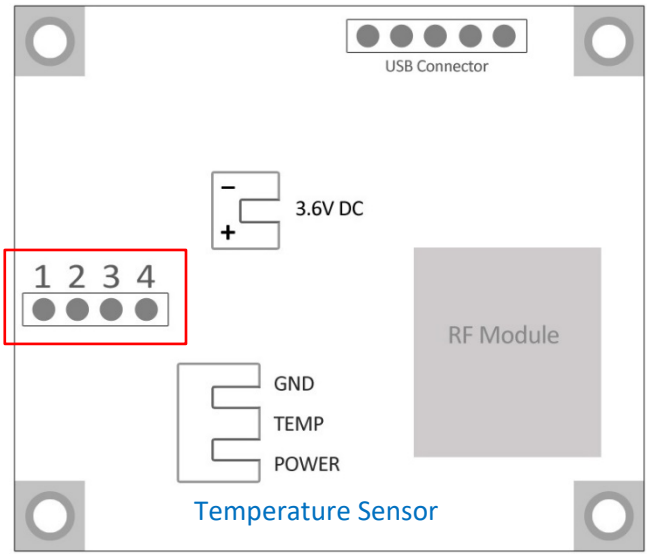
(6) G7-TP Wireless Temperature Pressure Sensor

G7-TP provides channel input of temperature and pressure sensor.
It is powered by 2.5~3.6V battery.

Probe Specification:

- Digital Temperature Sensor (DS18B20)
- Honeywell NBP 150psi Pressure Sensor





4. Specification

Base Station

Power:	5.5mm socket, 5VDC, 500mA
Enclosure:	Aluminum Casing, 82 x 42 x 90 mm
Current	85mA (Data Incoming)
	18mA (standby)
Peak Pulse Current	< 135mA
Operating Temp:	-35˚C ~ +75˚C
Standby Temp:	-50˚C ~ +80˚C
Network Port:	RJ45, 10/100M Ethernet
Protocol:	TCP/IP

Wireless Temperature & Humidity Sensor / Wireless Digital Alarm Input

Power Source:	2.5 ~ 3.6VDC
Standard Power:	Internal 3.6VDC, 3400mAh Battery (Non-Rechargeable)
	Internal 3.6VDC, 14000mAh Battery (Non-Rechargeable) – Ex series
Optional Solar Power:	1W Solar Panel and 3400mAh Rechargeable Battery
Enclosure:	Outdoor PVC, 80 x 80 x 28 mm
	Outdoor PVC, 115 x 90 x 55 mm – Ex series
Current	6mA (Data Transmission), 3uA (standby)
Operating Temp:	-35˚C ~ +75˚C
Standby Temp:	-50˚C ~ +80˚C

[Temperature Sensor]	[Humidity Sensor]
Digital DS18B20: -55 ~ +125 ˚C	ST21: 0 ~ 100%RH

Wireless Analog Sensor

Standard Power:	Internal 2.5 ~ 3.6VDC, 14000mAh Battery
Optional Solar Power:	1W Solar Panel and 3400mAh Rechargeable Battery
Enclosure:	Outdoor PVC, 115 x 90 x 55 mm
Current	6mA (Data Transmission) + analog sensor probe rating
	10uA (standby excluding sensor probe)

RF Wireless Transmission

RF Wireless:	SMA connector, 433MHz, 4.8Kbit/s
RF Channel:	20 Channels
RF Power:	10dB

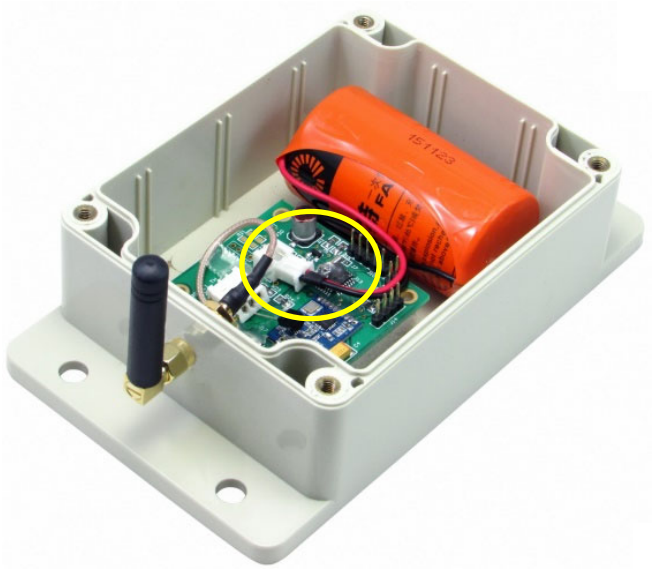
Safety:

- Do not touch the antenna
- Not designed for medical equipment or aerospace application

Power Input: 2.5 ~ 3.6VDC

Options of power source:

1. 3400mAh for average 3 years operation
   - internal non-rechargeable battery
   - external RF antenna
   - waterproof case, 80 x 80 x 28mm



2. 14000mAh for average 5 years operation
   - internal non-rechargeable battery
   - external RF antenna
   - waterproof case, 115 x 90 x 55mm

3. Solar Power
   - 1W solar panel
   - rechargeable Li-ion 3400mAh battery
   - external RF antenna
   - waterproof case, 115 x 90 x 55mm
   - optional external 6W solar panel
   - optional rechargeable 6500mA battery

Sensor Board LED

Each board has a status LED

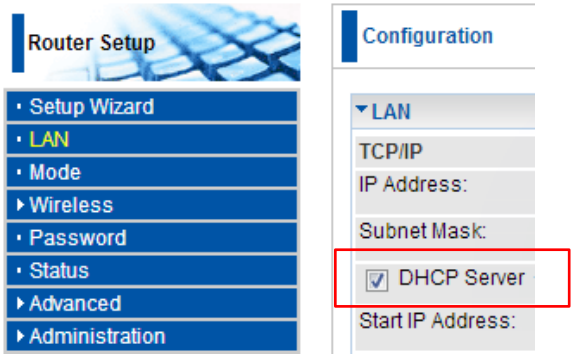
- Right after battery is connected, it is ON for few seconds then OFF.
- Standby: LED is off
- Data Upload: LED flash
- When the battery is low in power or voltage, LED keeps ON or flashing.
- When USB adaptor is wrongly aligned and inserted, it is ON for few seconds then OFF.

5. Base Station Installation

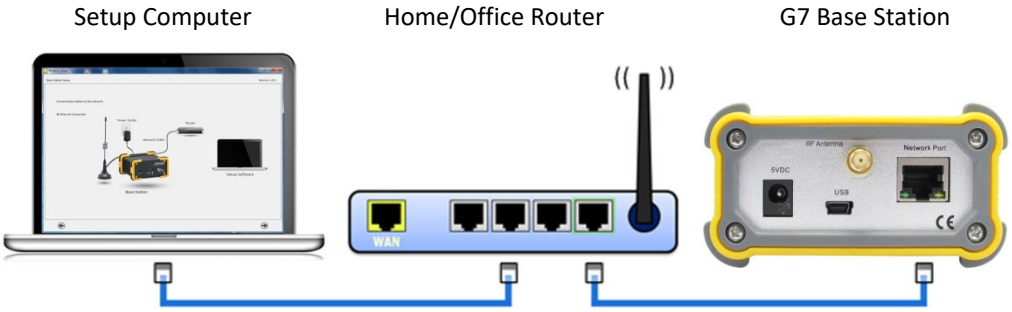
1) Connection

- Plug the network cable from Base Station to router
- Make sure that the router is DHCP enabled
- Make sure that only one Ethernet port is enabled in setup computer

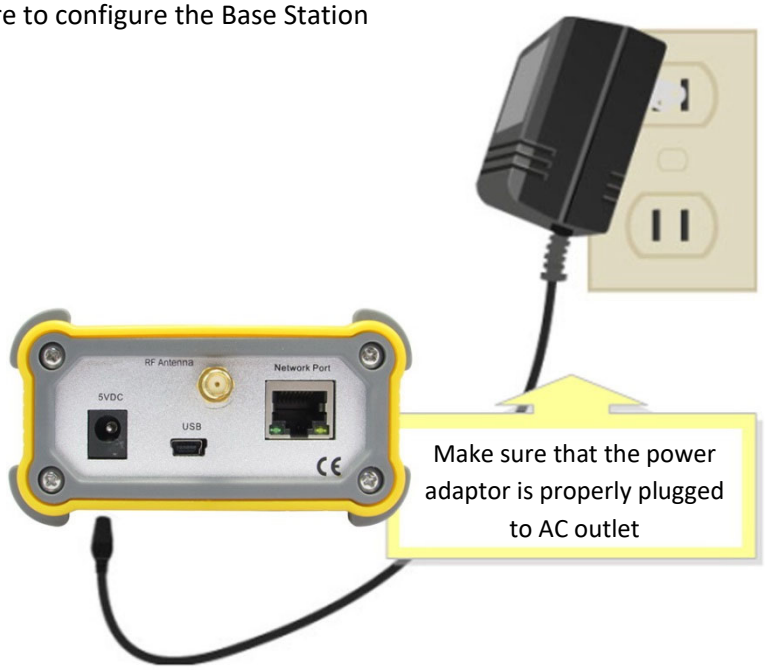
  When Ethernet and Wi-Fi are available in computer, one of these must be disabled.



- Disable the router firewall



- Plug the RF Antenna to Base Station
- Plug the AC/DC Power Adaptor (Output: 5V, 2A) to AC Outlet
- Power LED is ON & Upload LED is blinking
- Run “G7 Setup” software to configure the Base Station



Note: USB port is for local data download.

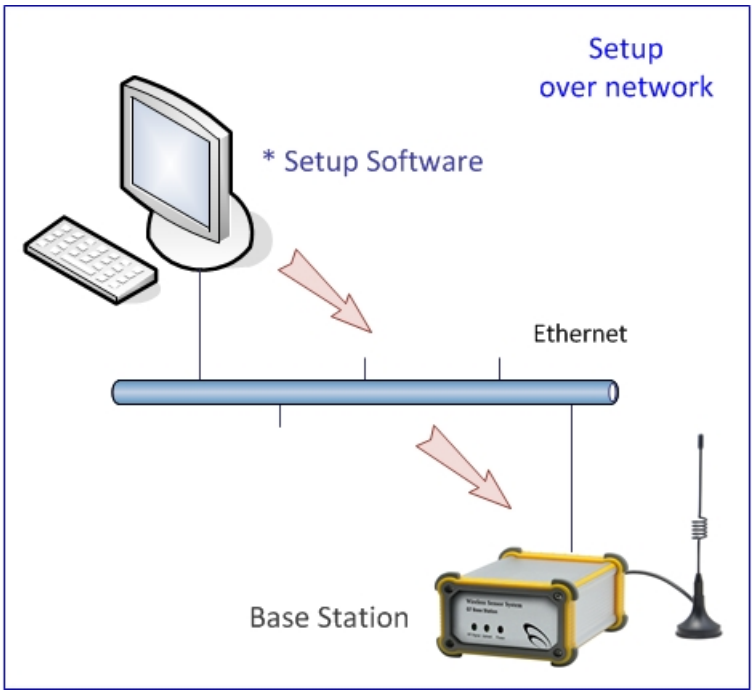
2) Configuration

Computer Hardware Requirements of Setup & Centre PC:

- Intel Core2 Duo CPU E6550 or above
- 4GB RAM, 100GB hard disk
- Windows 10 or 11
- Minimum 1024 x 768 display

Software: [detail on following Sections]

- G7 Setup Software - setup the Base Station & Wireless Sensor
- G7 Centre Software - receives data from Base Station over network



Start Up Steps

(1) Connect Base Station to network

(2) Configure Base Station using “G7 Setup” Software

(3) Connect Wireless Sensor to computer via USB port

(4) Configure Wireless Sensor using “G7 Setup” Software

(5) Exit Setup Software

(6) Run “G7 Centre” Software to receive data

DO NOT run Setup Software and Centre Software in the same computer at the same time!

6. Setup Software

Two setup software are bundled for different models.

G7 Setup

- Configure the Base Station ..... page 16
- Configure the following sensors: ..... page 25
  - ✓ G7-T2, G7-TX Temperature Sensor
  - ✓ G7-H2, G7-HA Temperature & Humidity Sensor
  - ✓ G7-AD Analog Sensor
  - ✓ G7-D2 Digital Alarm Input
  - ✓ G7-LK Water Leakage Detector
  - ✓ G7-TP Temperature & Pressure Sensor

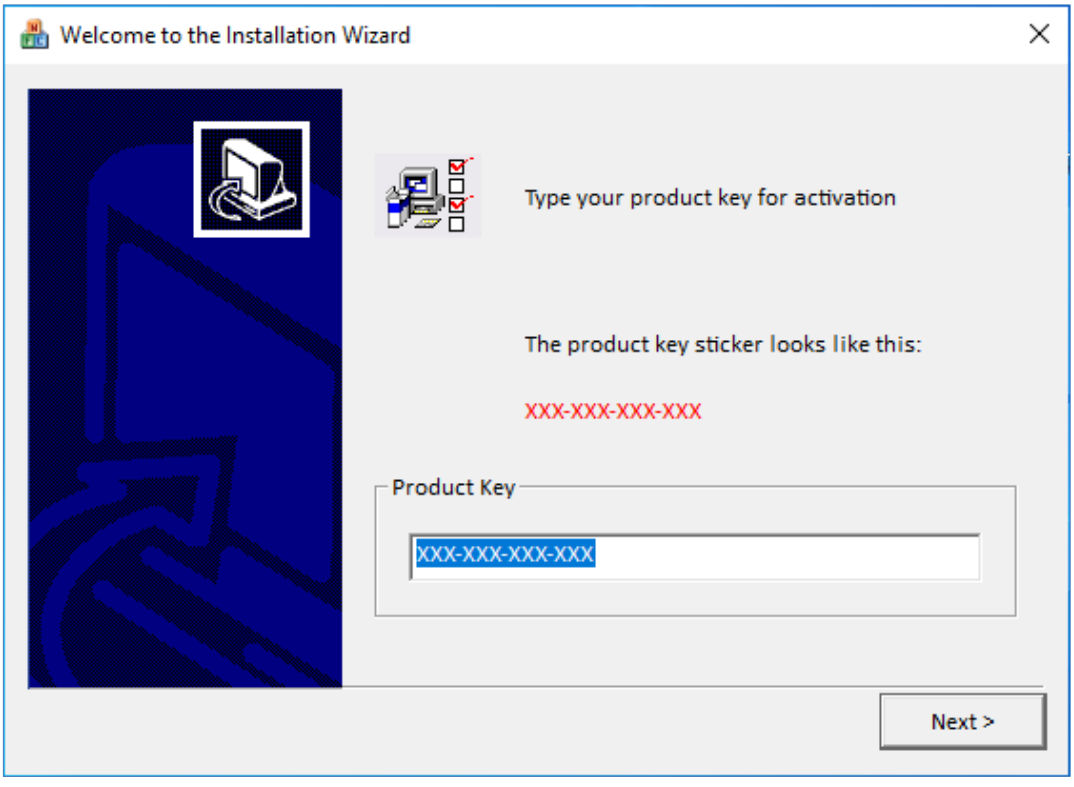
G7 Sensor Setup

- Configure all sensors with relay: ..... page 64
  - ✓ G7-T2-R Temperature Sensor with Relay
  - ✓ G7-H2-R Temperature & Humidity Sensor with R
  - ✓ G7-D2-R Digital Alarm Input with Relay
  - ✓ G7-DT-R Dual Temperature Sensor with Relay
- Configure Modbus sensors: ..... page 70
  - ✓ G7-MS Modbus Sensor or Meter

7. Network Setup

Install “G7_Setup_2.2.x.exe” and Run G7 Setup Software

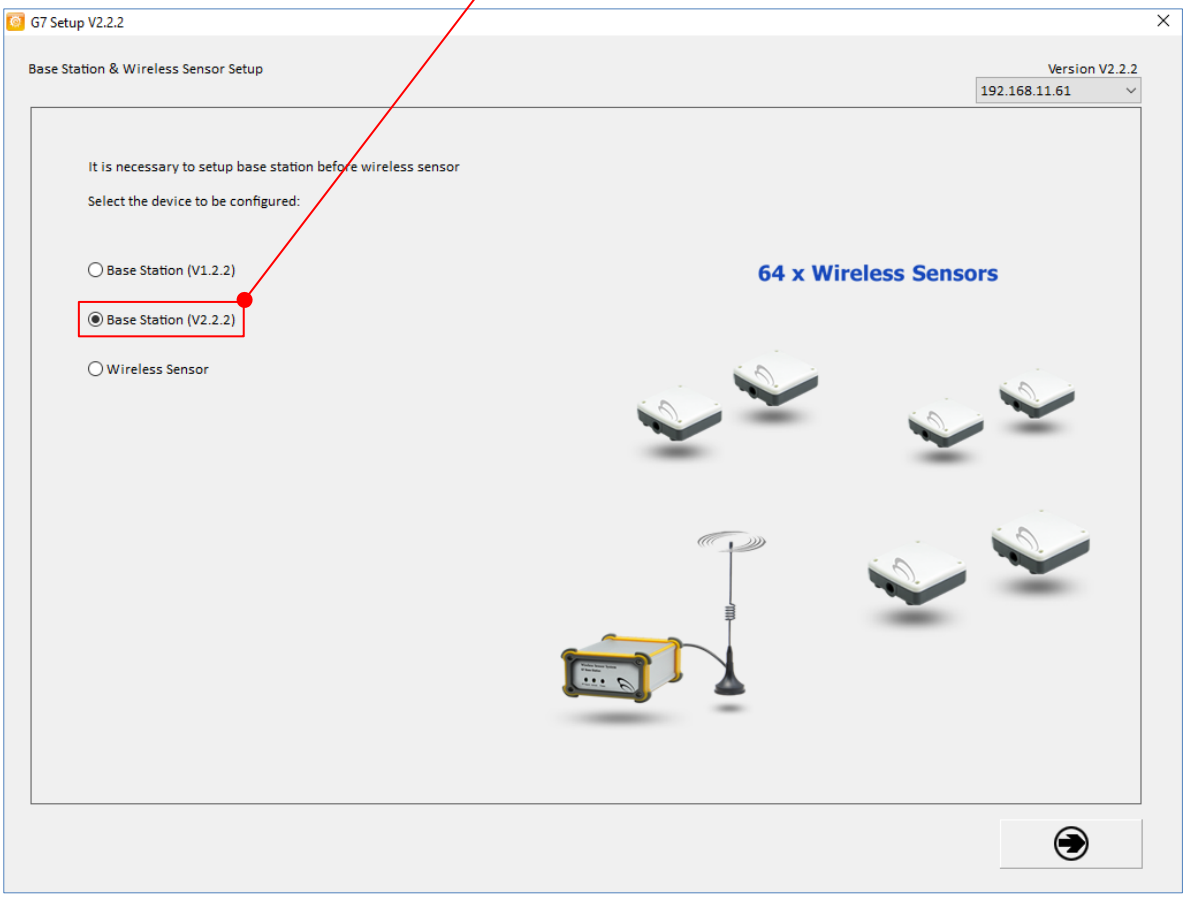
Enter the product key provided in the download link:

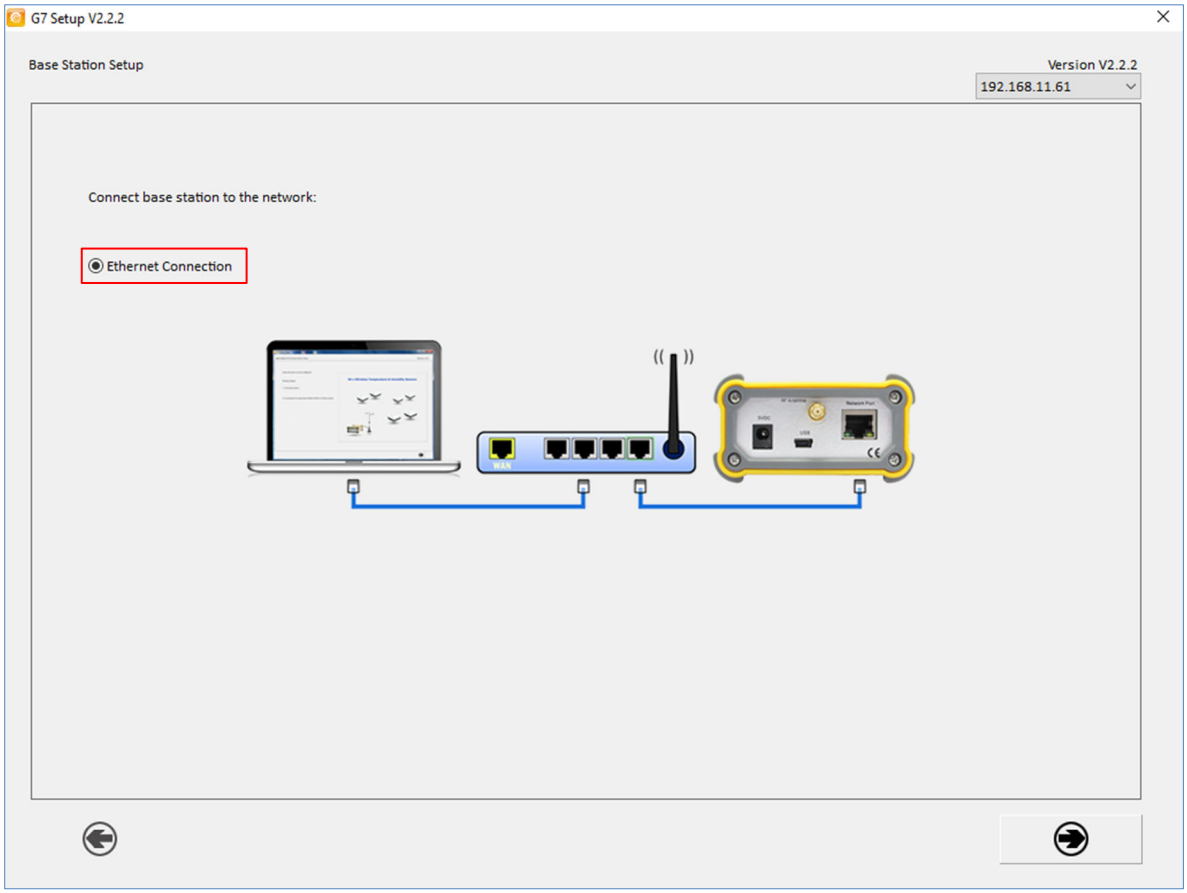


Configure the base station before wireless sensors
Check the label on base station
Select the base station version

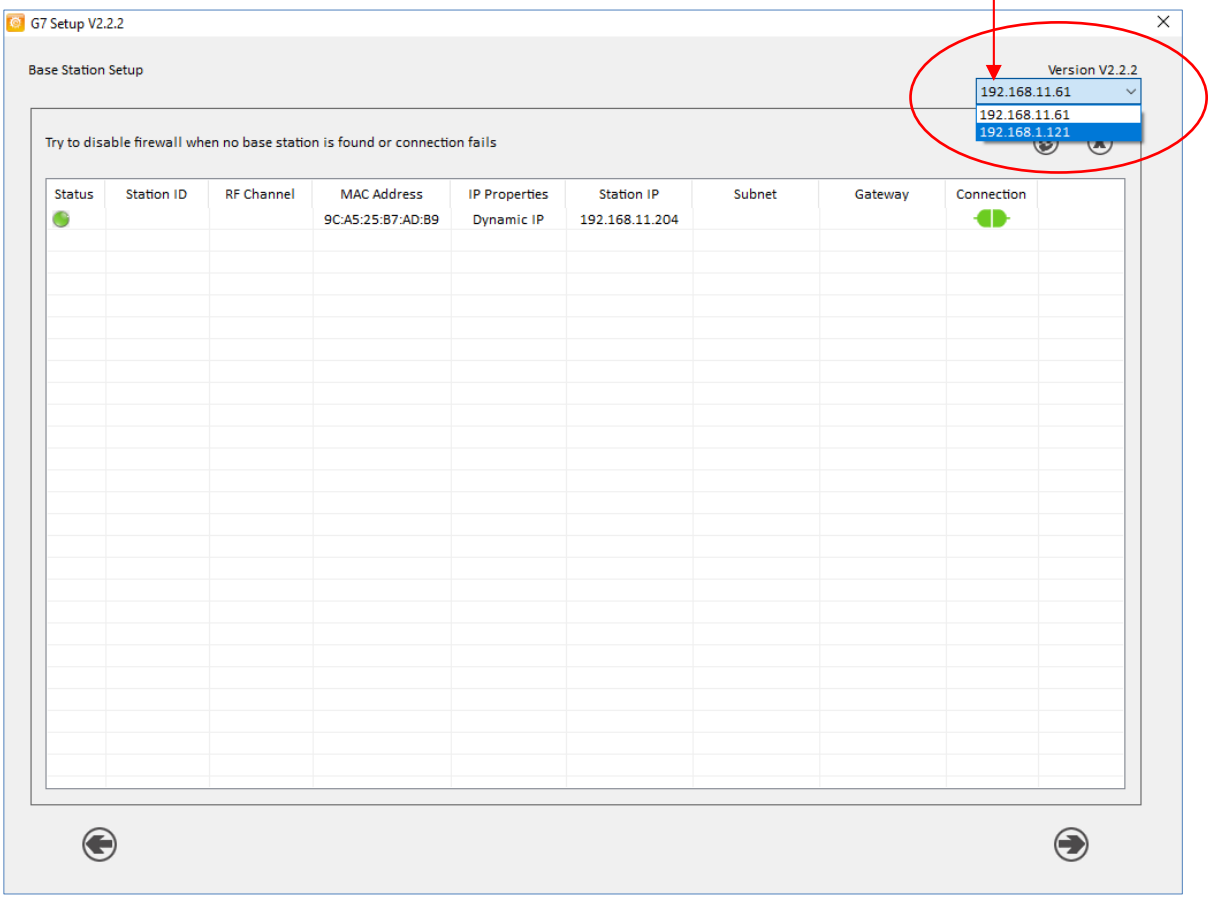
G7-BS (V1.2.2)

G7-BS (V2.2.2)



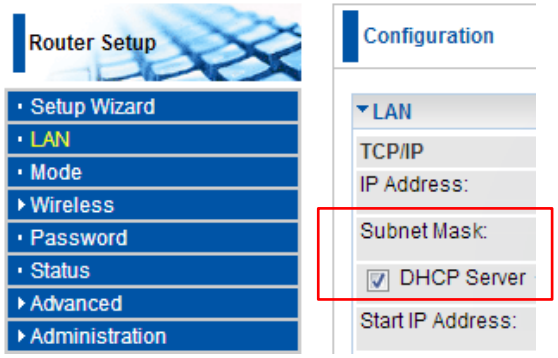


It will show two or more IP when your computer is connected to different networks at the same time. Select the setup computer IP in the same subnet of base station.



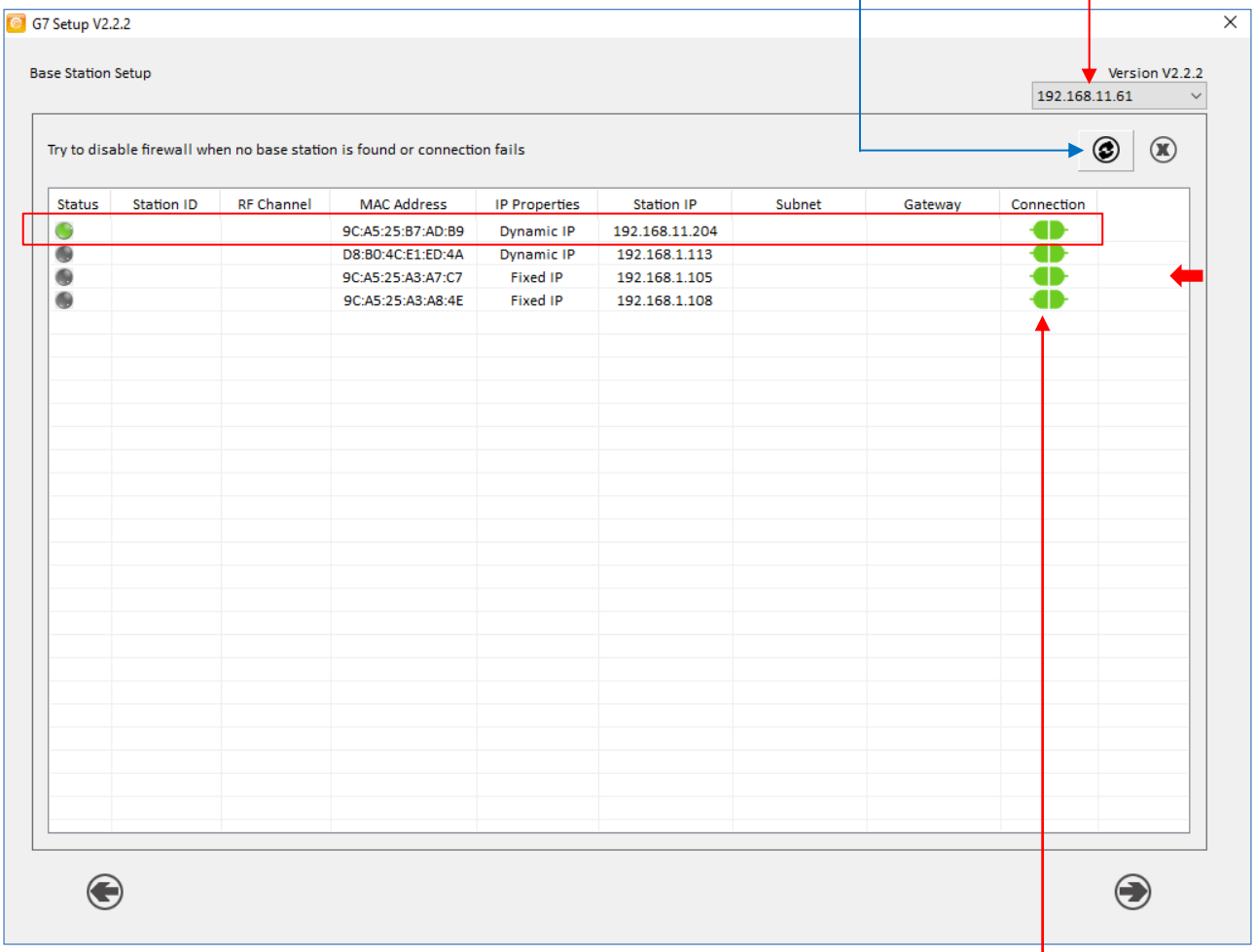
7.1 "Automatic Dynamic IP" Network Setting [recommended default setting]

(1) Base Station is configured as "Dynamic IP" by default
(2) Make sure that the router is DHCP enabled
(3) Setup Software scans the local network and search for connected base stations



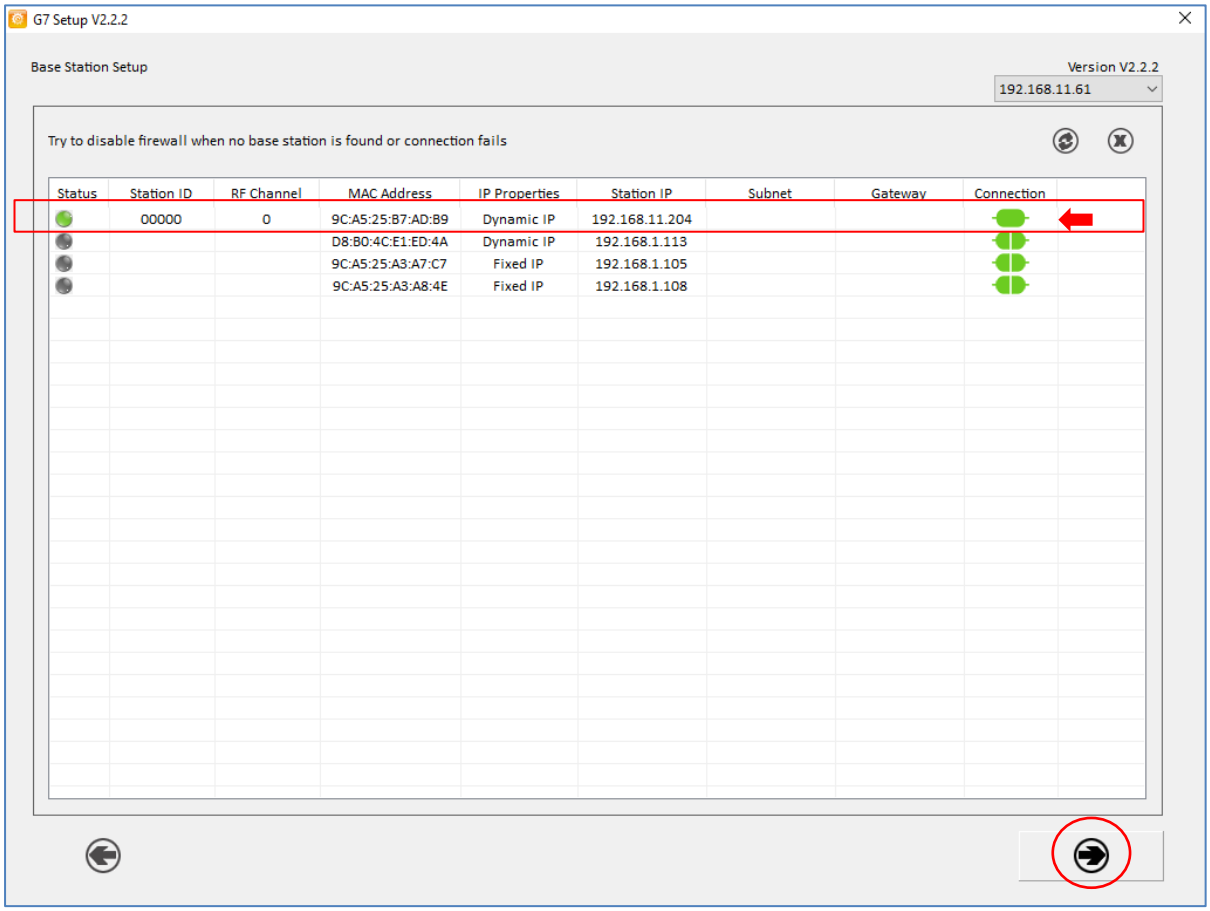
Click [Refresh] icon to rescan the network and detect any base stations connected in the network

Select the setup computer IP in the same network of base station

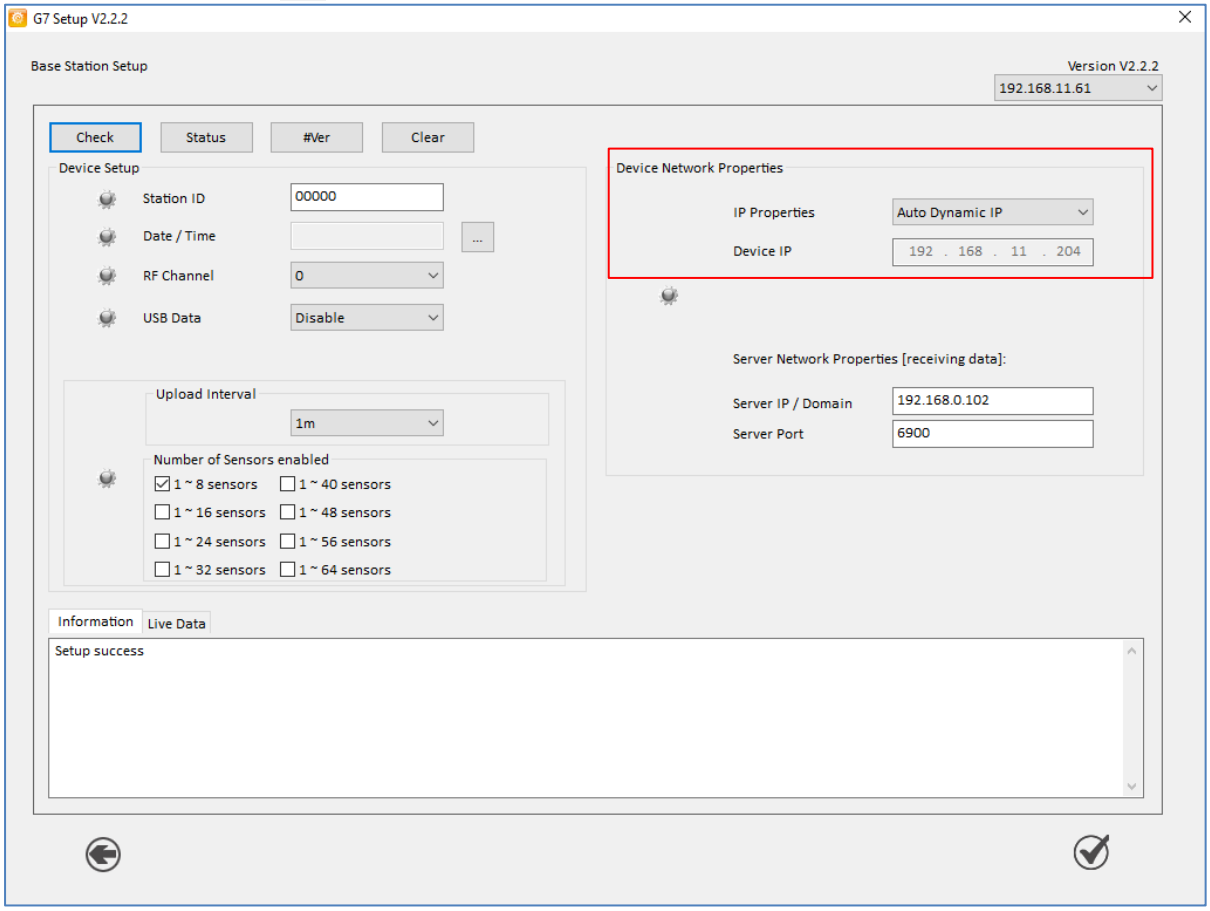


(4) Setup will list all the base stations connected to the same network
(5) Select the station, and DoubleClick the [Connection] icon 
(6) Base Station will then be connected to Setup Computer
(7) Its Station ID and RF Channel will be displayed once connection is established

[ ] → [ ] indicates that the base station is connected



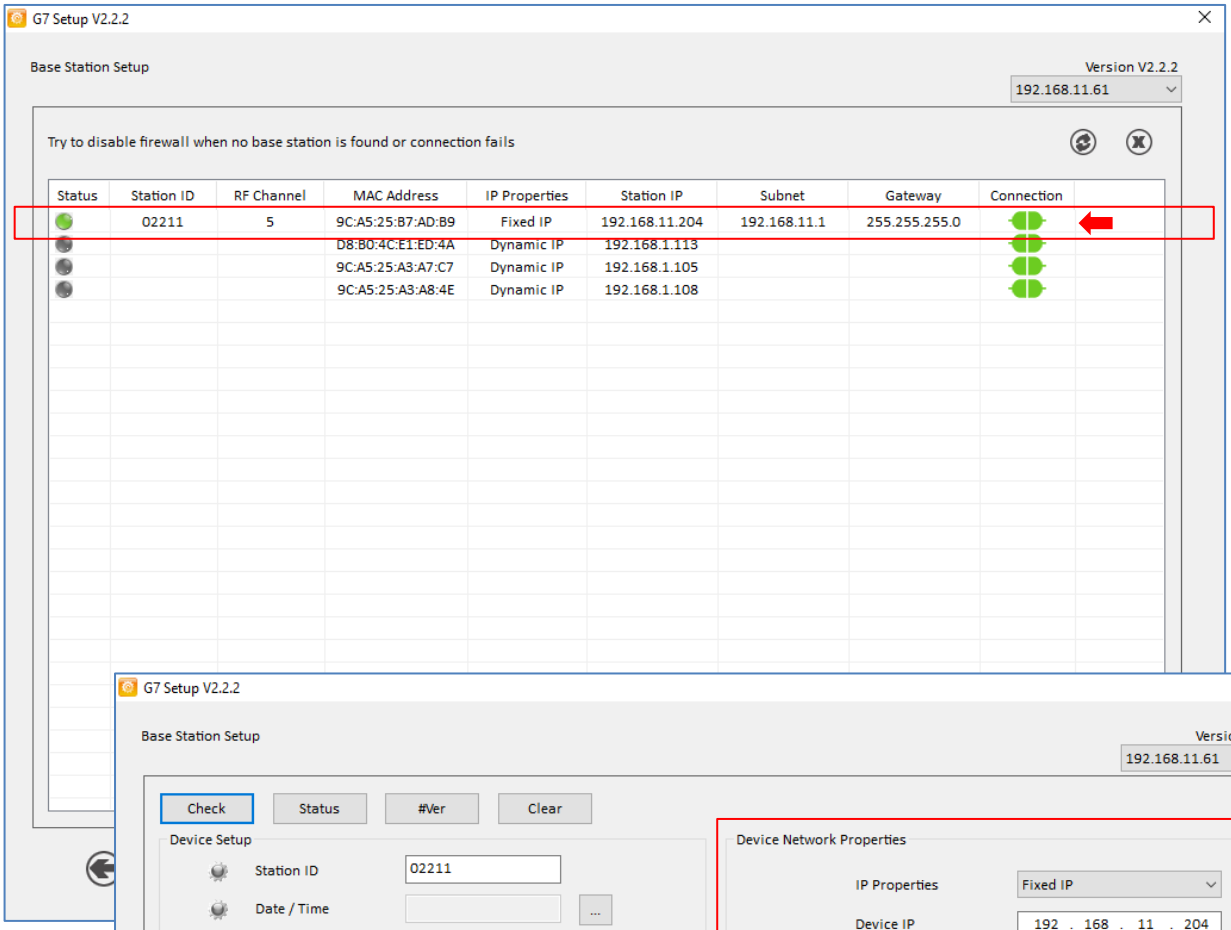
Click [Next] button

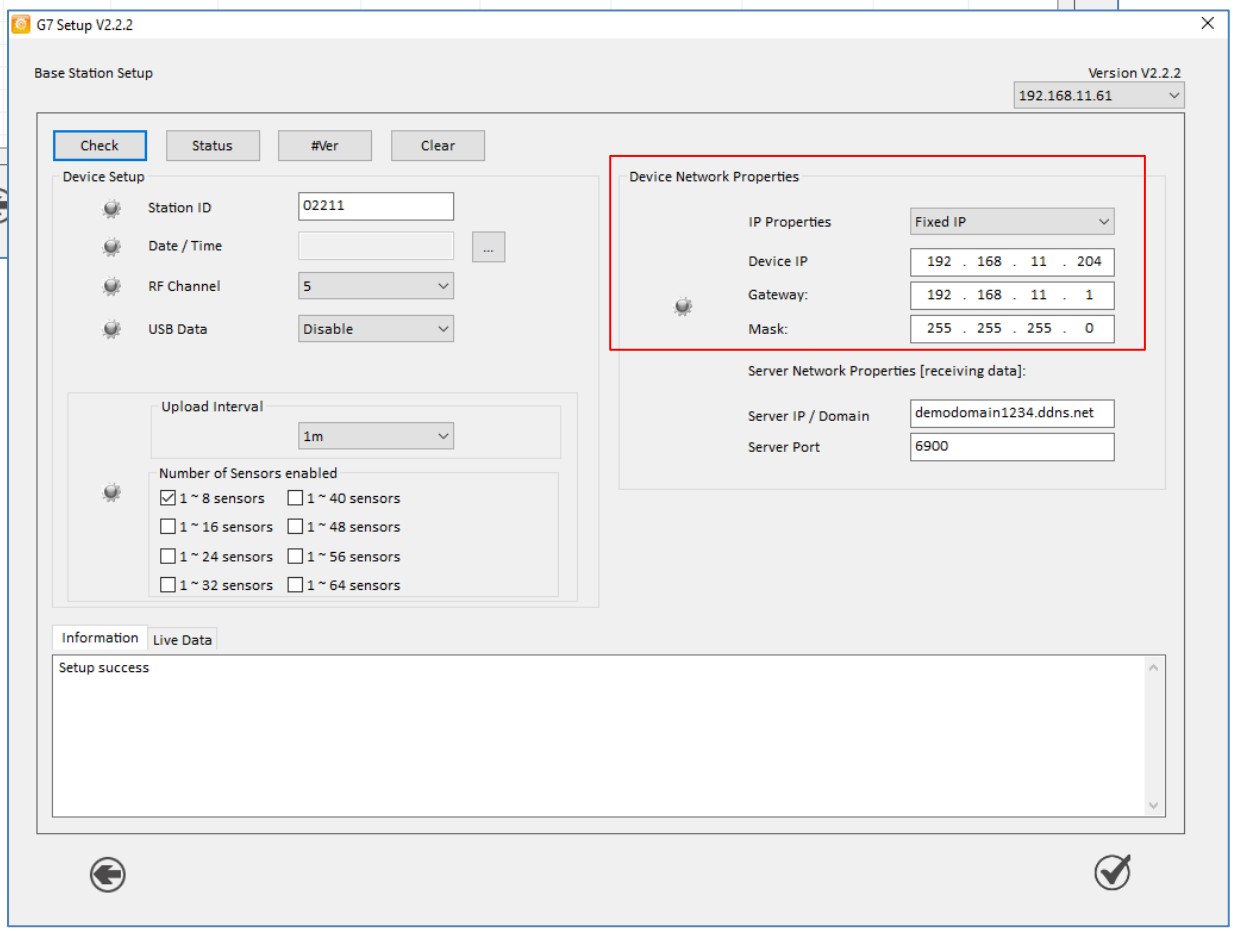


Skip Section 7.2 when Base Station is Dynamic IP enabled

7.2 "Fixed IP" Network Setting

(1) Setup Software scans the local network and search for connected base stations
(2) Base Station is previously configured as "Fixed IP"
(3) Select the base station, and Double Click the [Connection] icon [ ] → [ ]
(4) Click [Next] button





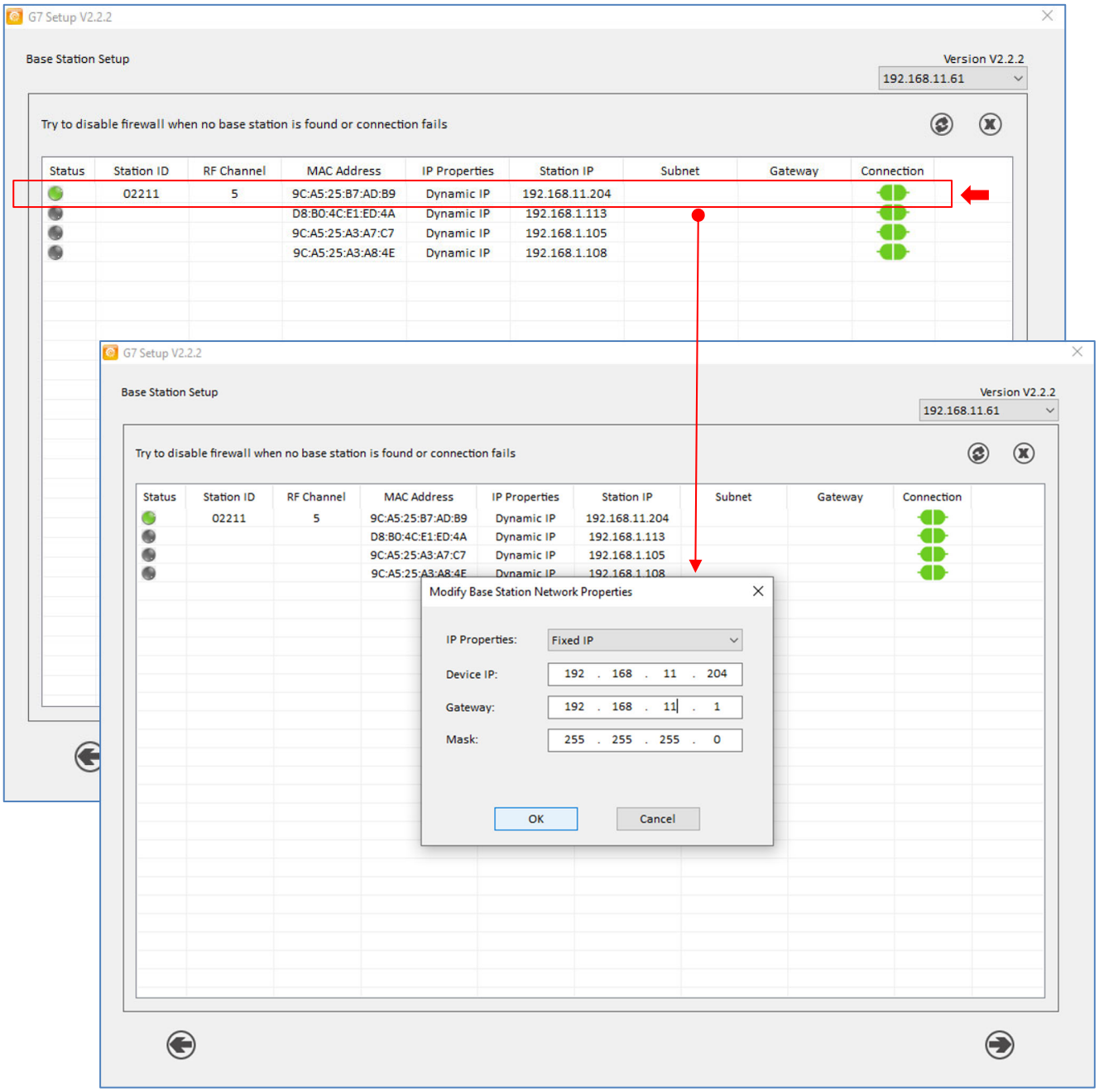
7.3 Network Properties Modification before connection

If connection fails in section 6.1 or 6.2, network properties should be modified.

Network properties must be changed before clicking the [Connection] icon in following condition.

* Base Station is Fixed IP enabled but not in the same subnet as Setup Computer
  Base Station must be configured to the same subnet before clicking [Connection] icon

  - Do not click [Connection] icon
  - Select the base station
  - Double Click Right mouse button to modify the network properties



8. Base Station Setup

(1) Configure the base station as below:

* Base Station ID, Server IP and Server Port

  Server IP is the IP address of computer receiving data

  G7 Centre, G7 Client or G7 Server Software is able to receive and save data in central server

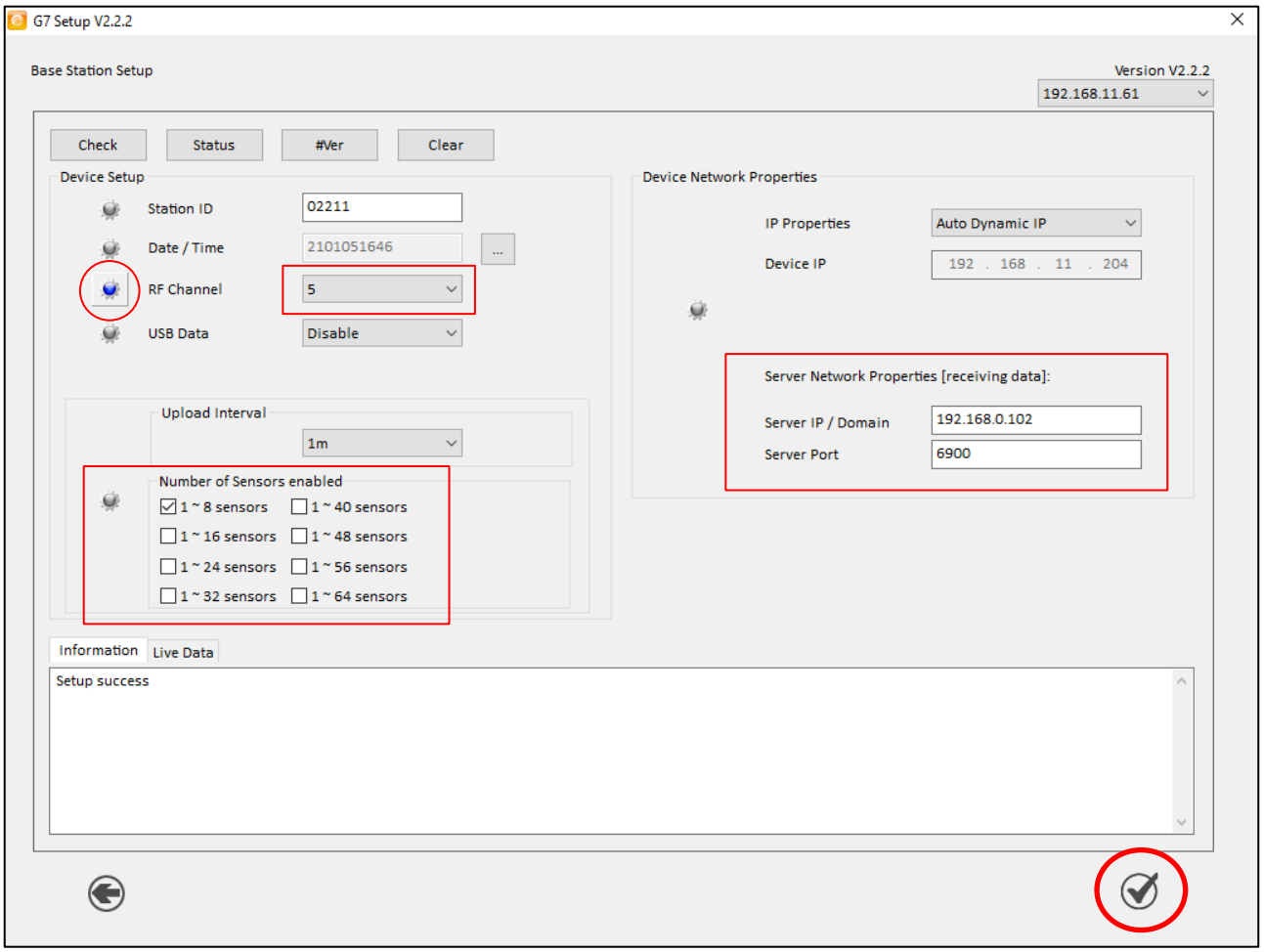
* Maximum number of wireless sensors assigned to the base station

* RF Channels must be different when 2 or more stations work in the same area

Click  to set the parameter

(2) Click “Check” button to display and verify the setting

(3) Click [] to complete and save the configuration parameters



RF Channel: 0 ~ 20

Upload Interval: 5s, 10s, 15s, 30s, 1m, 2m, 5m,10m, 15m, 30m, 1h, 2h, 3h, 4h

USB Data is only enabled for local data transfer.

USB Port output interval = upload interval

Default Setting

Station ID:	00000	Device IP:	-
RF Channel:	0	Device Port:	-
Upload Interval:	2 min	IP Properties:	Automatic Dynamic IP
USB Data:	Disable	Server IP:	192.168.0.102
Sensors:	1 ~ 8	Server Port:	6900

Important Notes:

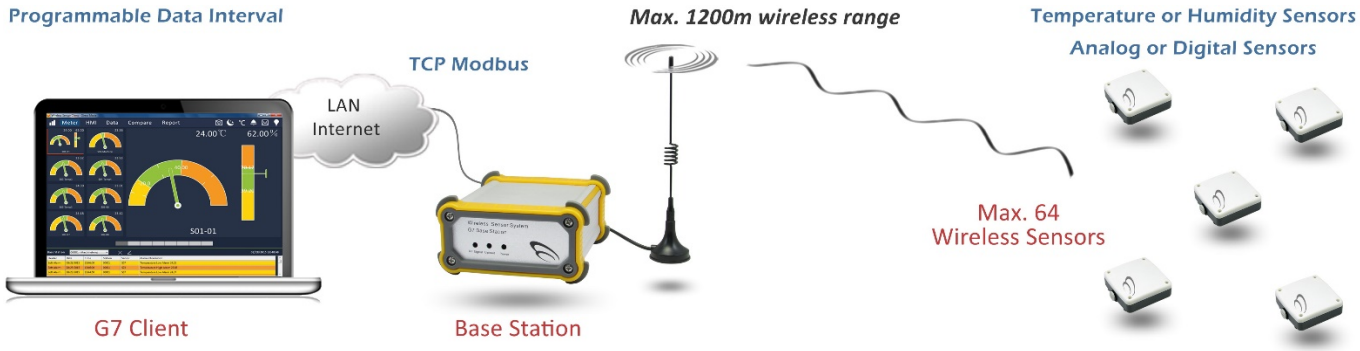
* When there are two or more base stations in the same working area, base stations should have different ID and RF channel.
* Wireless Sensors assigned to the same base station should have different sensor ID.

9. How to get data from Base Station?

Wireless Sensor sends temperature or humidity data to Base Station in user defined time interval.

Whenever Base Station receives data from wireless sensors, it will upload to the server IP.

Either G7 Centre or G7 Client Software can receive data from base station.



10. Configure Wireless Sensor - USB Connection

1) Battery

- Open the waterproof case cover
- Plug in and connect the battery
- LED blinks one time once battery is connected
- LED blinks one time when data is transmitted

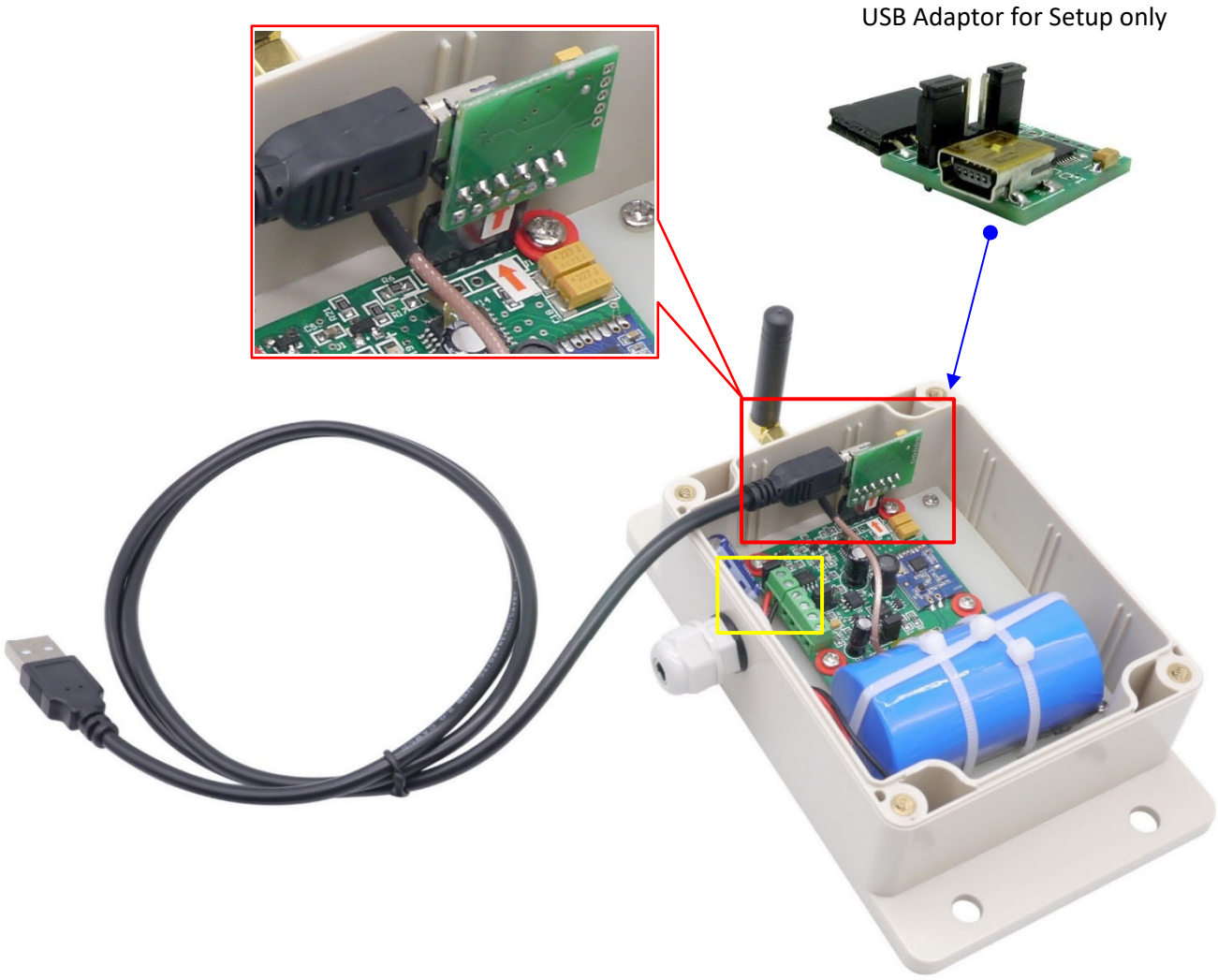
ⓘ Battery is Non-Rechargeable

2) USB Connection

- Plug in the USB adaptor for setup purpose only
- Connect the USB cable to the setup computer
- Install USB Driver, Run “G7 Setup” software to configure the sensor

3) Power & USB Connection

- Plug in the USB adaptor for setup purpose only
- Connect 3.6V battery wire
- Connect the USB cable to the setup computer with USB cable
- Install USB Driver, Run “G7 Setup” software to configure the sensor



NOTE:

* Click [ ] and exit setup software after configuration is completed.
* Unplug the USB adaptor from the sensor board.
* Base Station will upload data only when Setup Software is closed.

11. Setup Wireless Sensor

1. USB Adaptor

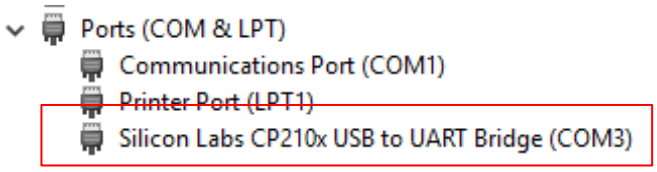
(1) Install the USB Driver
Run USB driver in folder \USB_Driver\

- CP210xVCPInstaller_x64 for 64bit Windows
- CP210xVCPInstaller_x86 for 32bit Windows

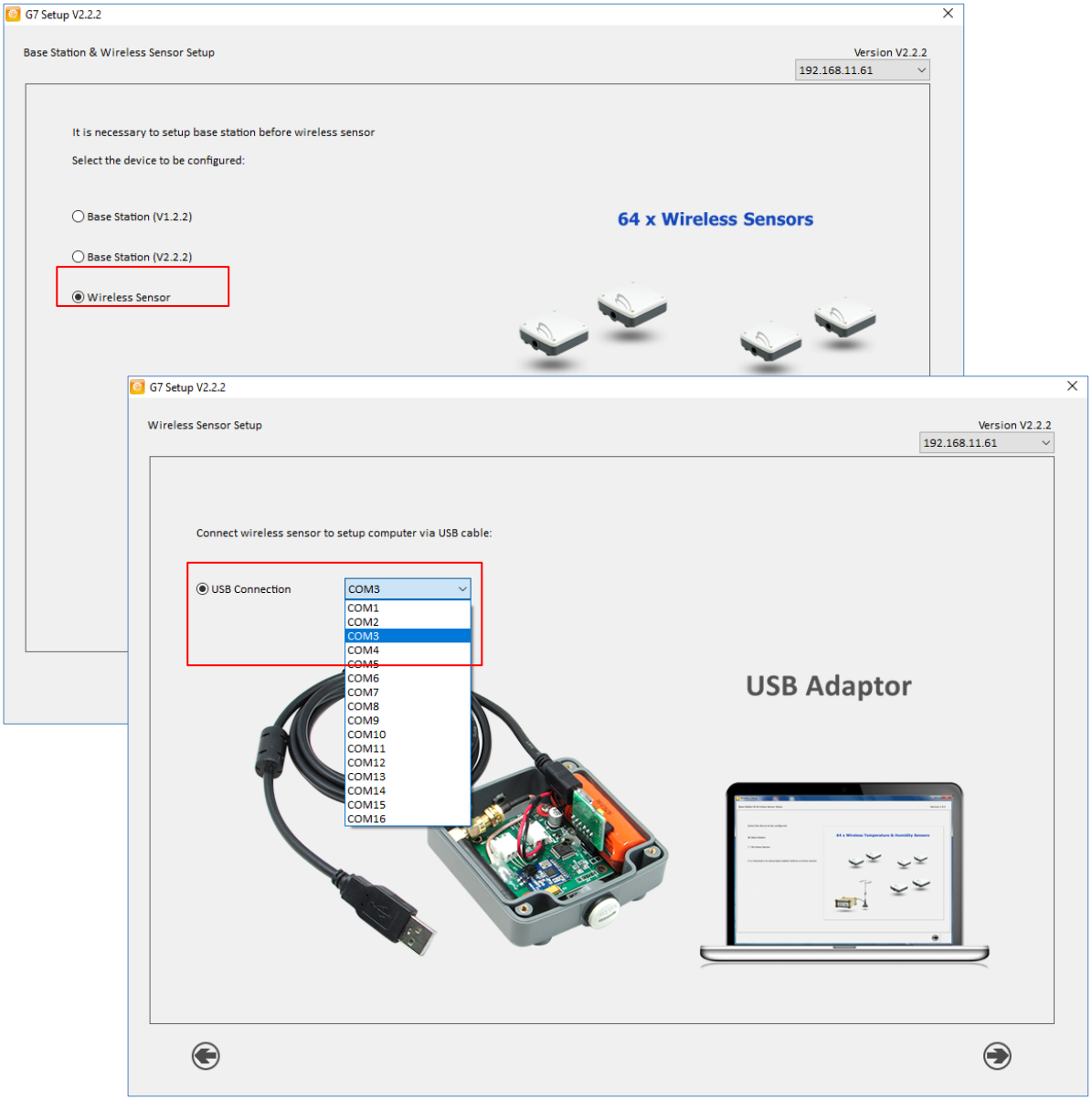
(2) Insert the USB adaptor onto the sensor board

(3) Connect with USB cable, and switch on battery power

(4) Check the COM Port in Device Manager

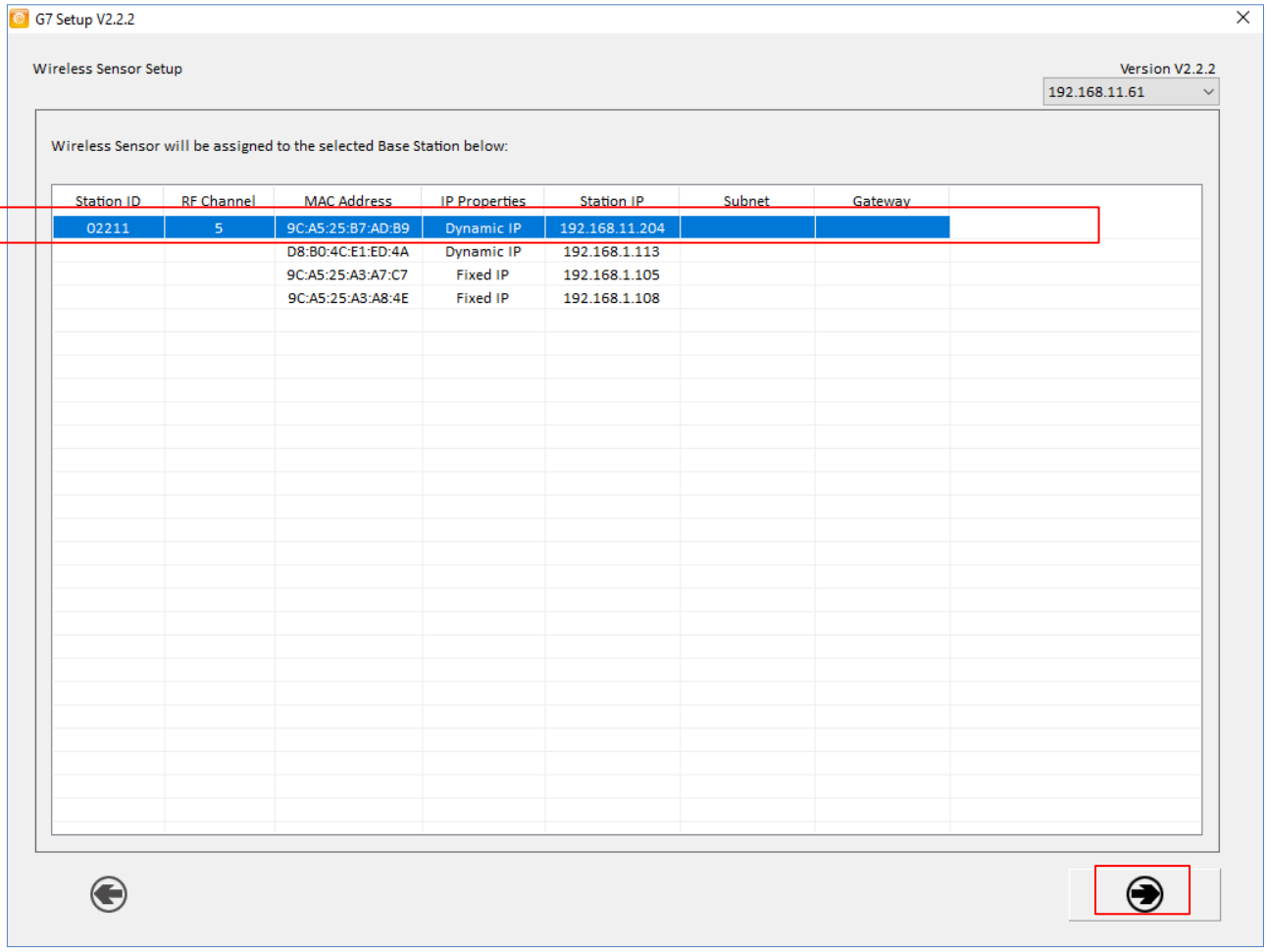


(5) Select the same COM port in Setup Software

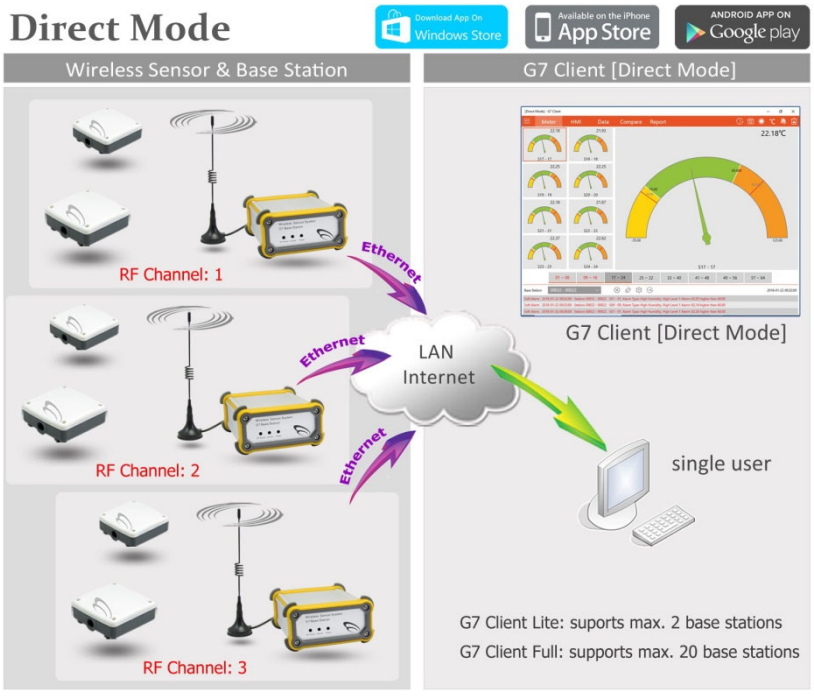


2. Assign Sensor to Base Station

(1) Choose the Base Station which will receives data from this sensor
(2) Only the Base Station with Station ID and RF Channel is valid
(3) Click “Mouse Left Button” to select the base station, and [ ] button



Make sure that base stations have different RF channels in same area



3. Temperature Sensor [G7-T2]

(1) Sensor ID

Sensor ID must be unique when connecting to the same base station.

When there is no data for some sensors, it is most likely that two or more sensors have the same sensor ID.

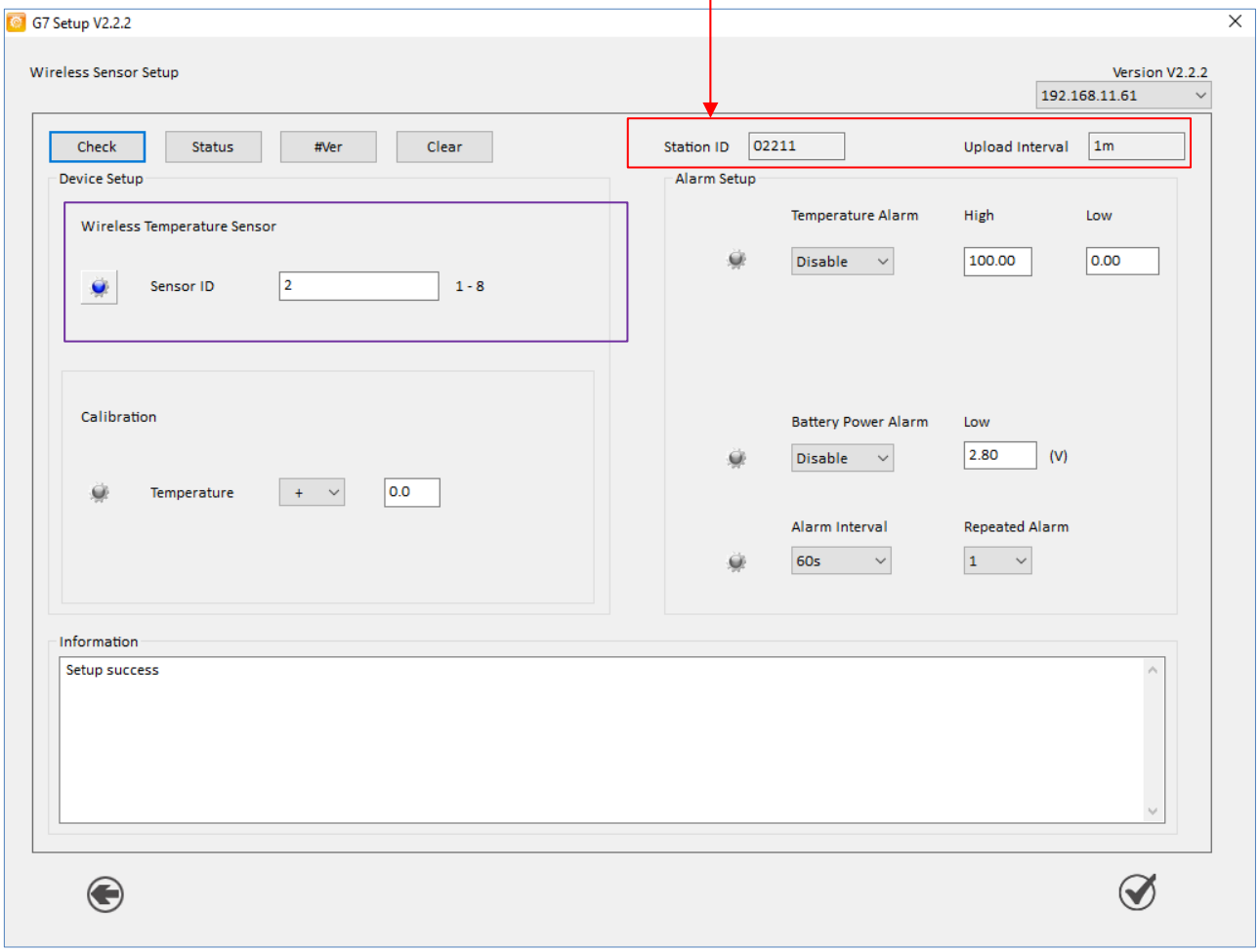
(2) Other parameters can be left as default.

(3) Calibration is only necessary when the reading is different to actual measurement.

(4) When alarm is enabled and configured, alarm data will be transmitted to base station.

(5) Sensor RF Channel and upload interval will be automatically configured to same as base station assigned.

(6) Click “Check” button to verify the setting



4. Temperature & Humidity Sensor [G7-H2/H3/HA/S2]

(1) Sensor ID

Sensor ID must be unique when connecting to the same base station.

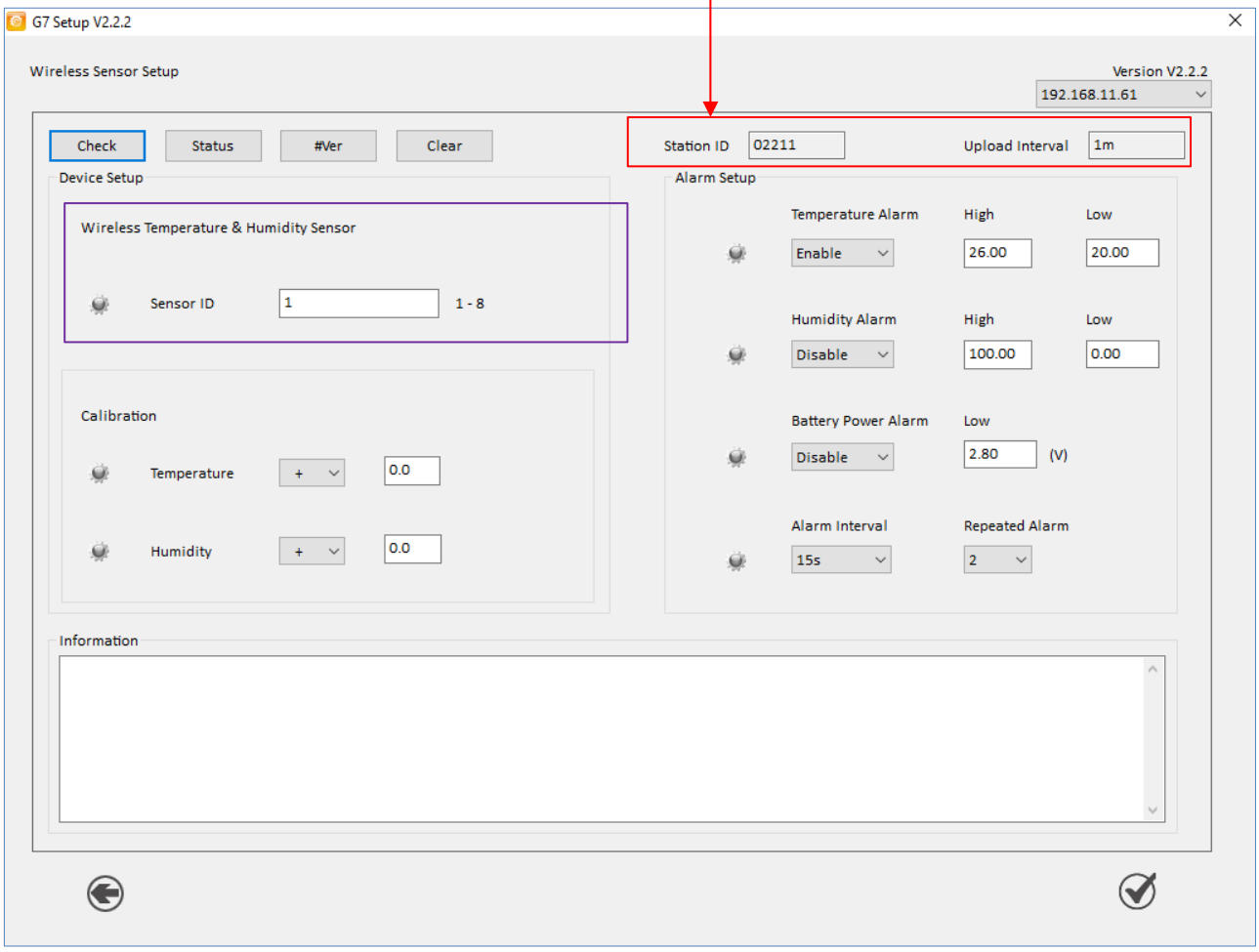
(2) Other parameters can be left as default.

(3) Calibration is only necessary when the reading is different to actual measurement.

(4) When alarm is enabled and configured, alarm data will be transmitted to base station.

(5) Sensor RF Channel and upload interval will be automatically configured to same as base station assigned.

(6) Click “Check” button to verify the setting



5. Analog Sensor (4-20mA) [G7-AD]

(1) Sensor ID must be unique when connecting to the same base station.

* Sensor Type (sensor signal type): 4~20mA

(2) Channel Setup

Upper Limit = Analog Sensor measuring highest range

Lower Limit = Analog Sensor measuring lowest range

Start Zero = 1

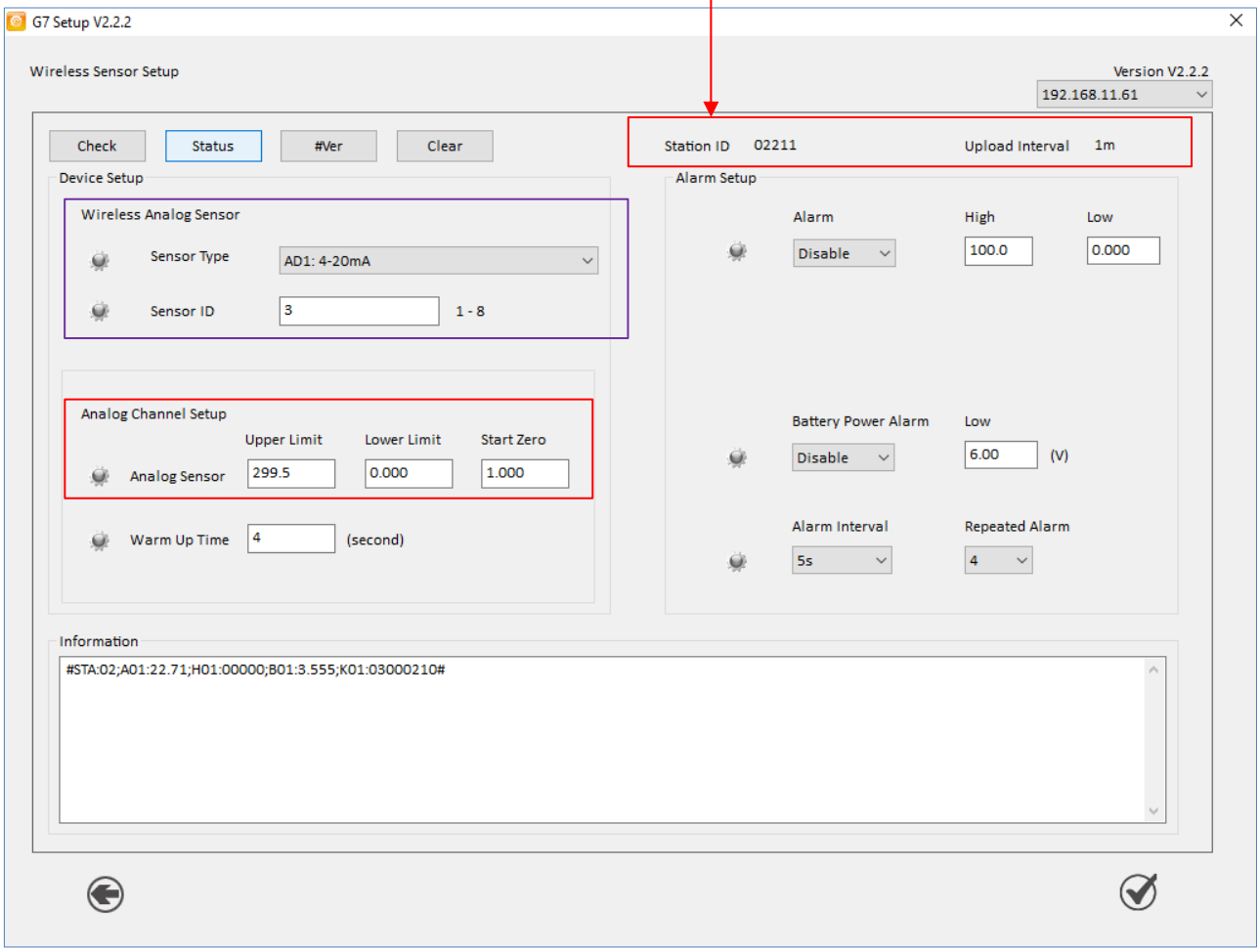
(3) Calibration is done by adjusting “Upper Limit” in comparing to actual measurement.

(4) Warm Up Time (0-250s) is to provide power before logging sensor measurement.

(5) When alarm is enabled and configured, alarm data will be transmitted to base station.

(6) Sensor RF Channel and upload interval will be automatically configured to same as base station assigned.

(7) Click “Check” button to verify the setting



6. Analog Sensor (0-5V) [G7-AD]

(1) Sensor ID must be unique when connecting to the same base station.

* Sensor Type (sensor signal type): 0-5VDC

(2) Channel Setup

Upper Limit = Analog Sensor measuring highest range

Lower Limit = Analog Sensor measuring lowest range

Start Zero = 0

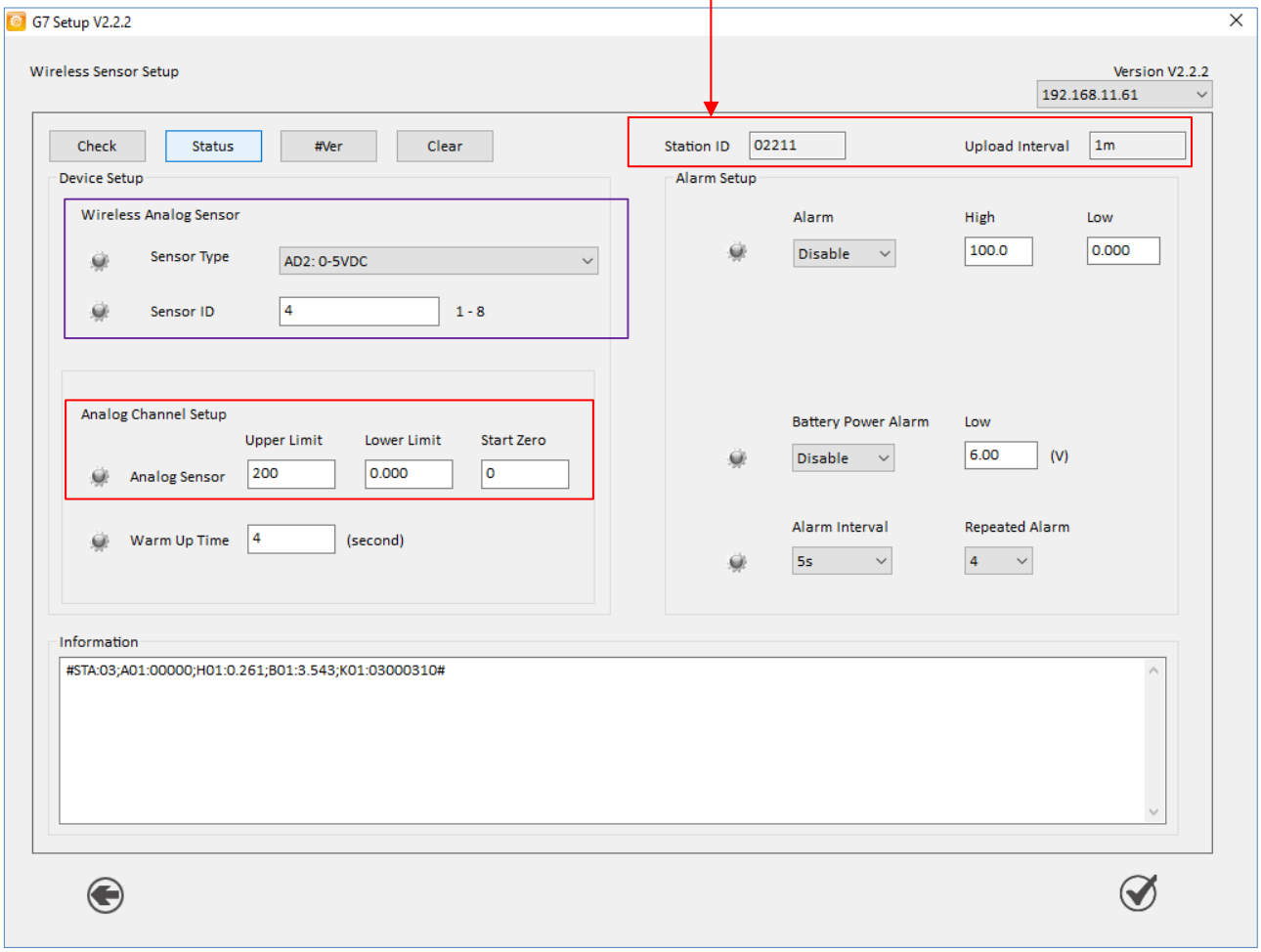
(3) Calibration is done by adjusting “Upper Limit” in comparing to actual measurement.

(4) Warm Up Time (0~250s) is to provide power before logging sensor measurement.

(5) When alarm is enabled and configured, alarm data will be transmitted to base station.

(6) Sensor RF Channel and upload interval will be automatically configured to same as base station assigned.

(7) Click “Check” button to verify the setting



7. Digital Alarm Input [G7-D2]

(1) Sensor ID must be unique when connecting to the same base station.

* Alarm Input: Dry Contact

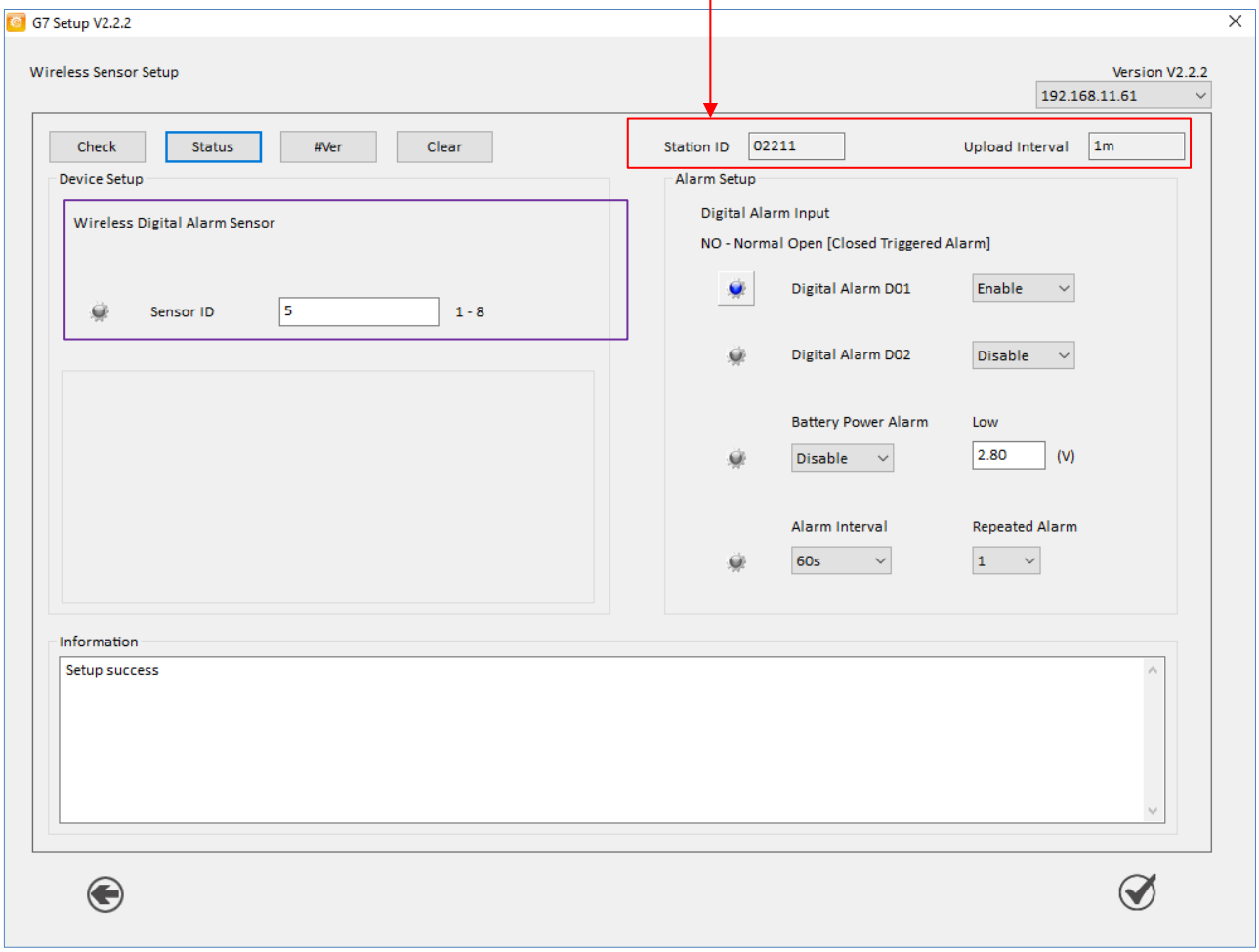
(2) Closed Triggered Alarm Input

(3) Each Sensor Board supports 2 alarm inputs.

(4) When alarm is enabled and configured, alarm data will be transmitted to base station.

(5) Sensor RF Channel and upload interval will be automatically configured to same as base station assigned.

(6) Click “Check” button to verify the setting



8. Digital Alarm Input (Synchronization Clock Built-in) [G7-D2S]

(1) Sensor ID must be unique when connecting to the same base station.

* Alarm Input: Dry Contact

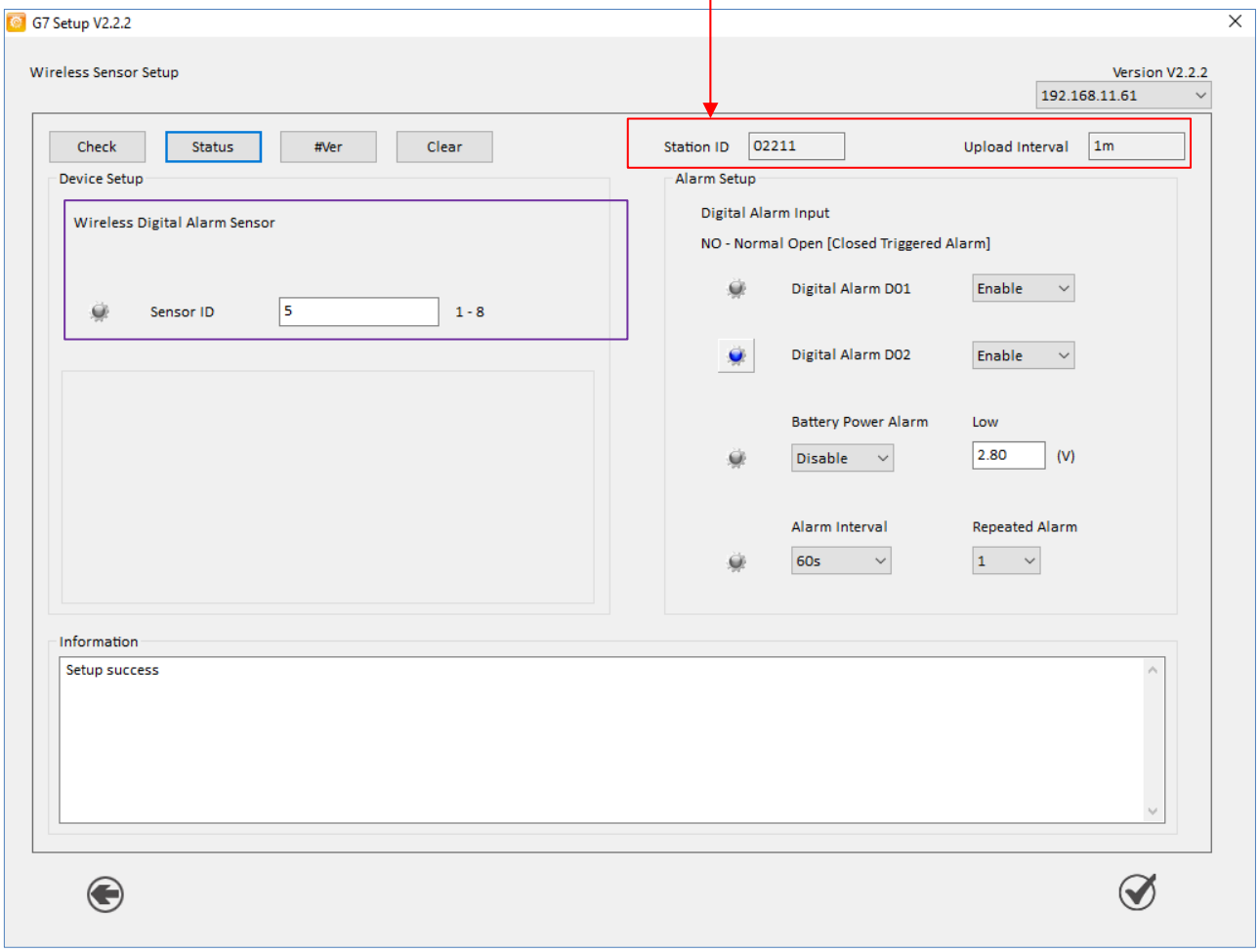
(2) Closed Triggered Alarm Input

(3) Each Sensor Board supports 2 alarm inputs.

(4) When alarm is enabled and configured, alarm data will be transmitted to base station.

(5) Sensor RF Channel and upload interval will be automatically configured to same as base station assigned.

(6) Click “Check” button to verify the setting



After click to complete and save the configuration parameters, reset the power to validate the settings (i.e. disconnect and reconnect the battery).

9. Water Leak Detector [G7-LK]

(1) Sensor ID must be unique when connecting to the same base station.

* Probe: Water Leak Pin or Cable

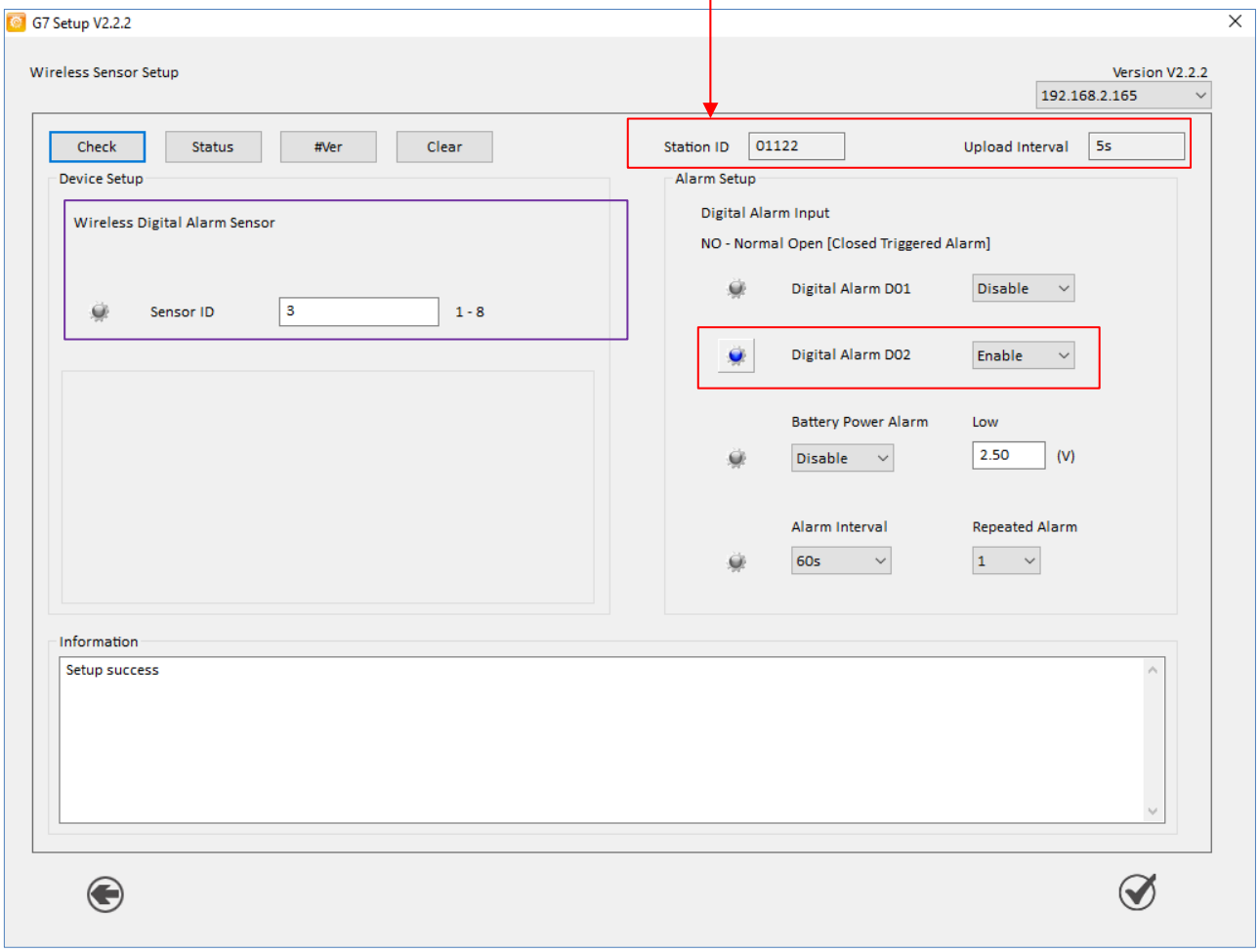
(2) Alarm is triggered when water contacts any 2 pins.

(3) Alarm is triggered when water contacts any part of cable.

(4) Alarm **D02** must be enabled, alarm data will be transmitted to base station.

(5) Sensor RF Channel and upload interval will be automatically configured to same as base station assigned.

(6) Click “Check” button to verify the setting



10. Temperature & Pressure Sensor [G7-TP]

(1) Sensor ID must be unique when connecting to the same base station.

(2) Temperature Calibration is done by adjusting measurement

- A: Temperature

(3) Pressure Calibration

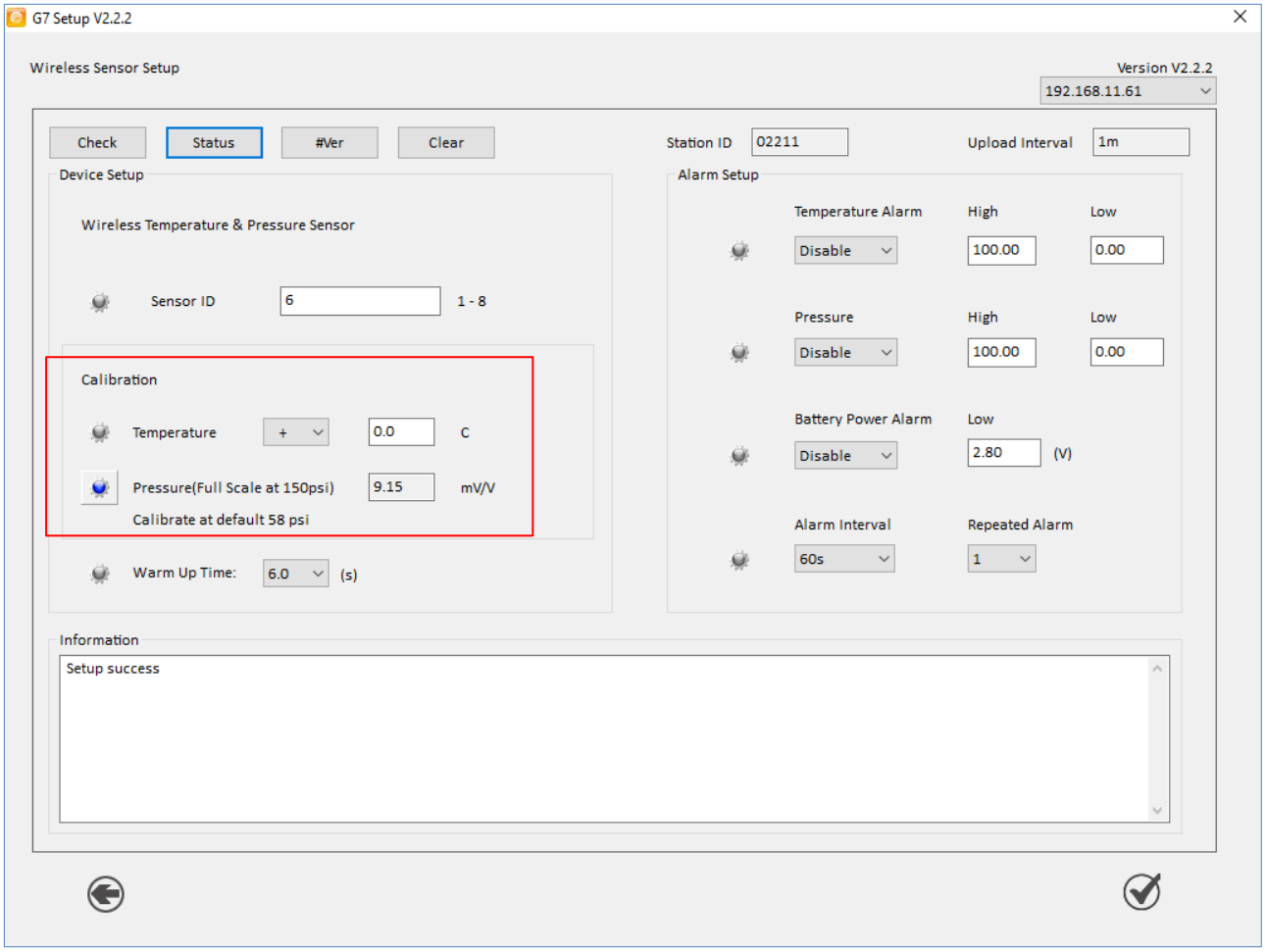
- H: Pressure
- Connect 58psi air pressure to the sensor probe
- Click [SET] button, setup software will automatically calibrate the hardware.
- Then, click [Status] to verify if the H reading is 58.

(4) Warm Up Time is to provide power before logging sensor measurement.

(5) When alarm is enabled and configured, alarm data will be transmitted to base station.

(6) Sensor RF Channel and upload interval will be automatically configured to same as base station assigned.

(7) Click “Check” button to verify the setting



11. Sensor Reading

(1) Click “Status” to get the reading instantly

(2) #STA:xx;A01:26.28;H01:57.63;B01:3.606;K01:03000110#

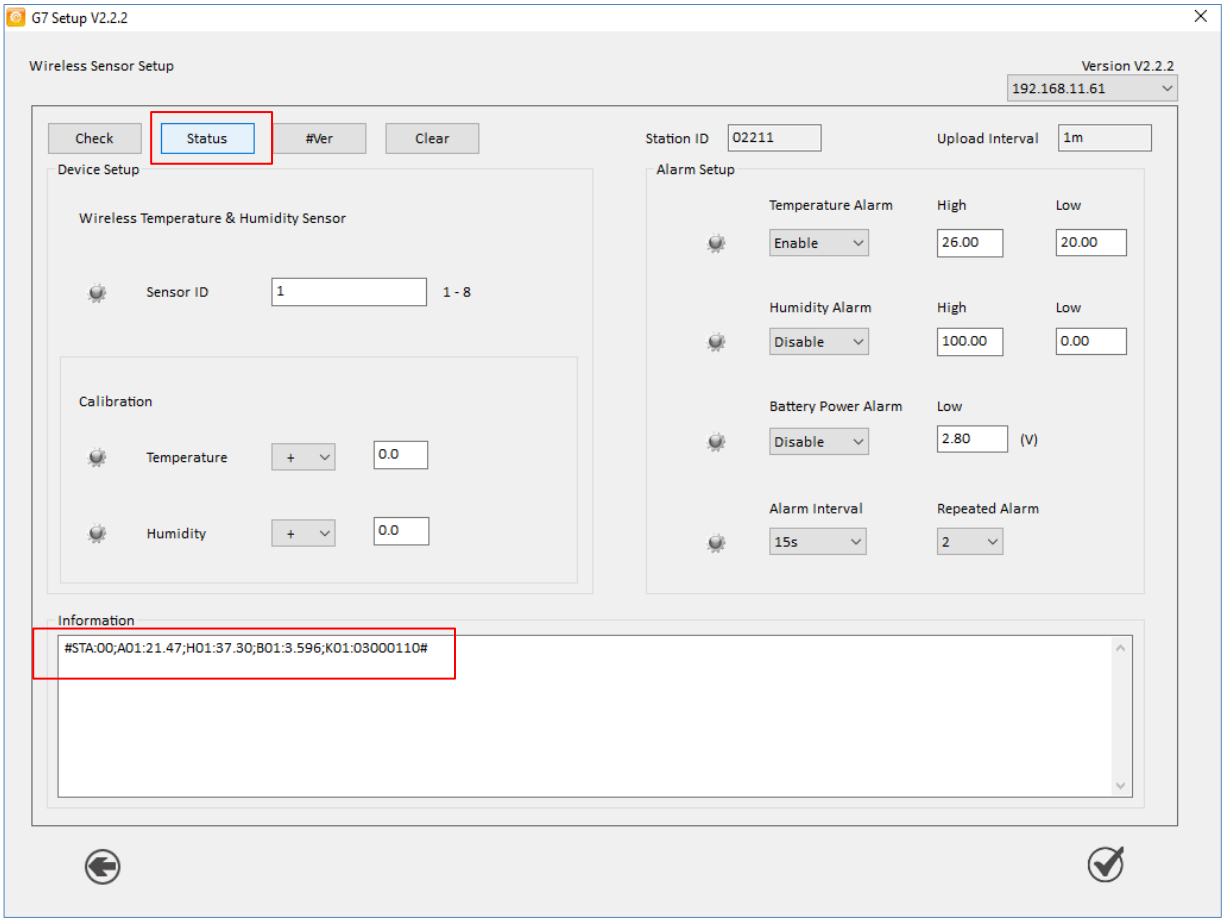
xx Sensor ID = xx + 1

Channel	G7-T2/H2/HA	G7-AD	G7-D2	G7-LK	G7-MB	G7-TP	G7-DT	G7-MS
A	Temperature	AD1: 4-20mA	D01: NO	--	Floating Point	Temp	Temp	Floating Point
H	Humidity	AD2: 0-5V	D02: NO	Water Leak	Integer	Pressure	Temp	Floating Point

B01 Battery Voltage

K01 Sensor Status

1st digit:	sensor probe	0 - normal	1 - defect	
2nd digit:	alarm	0 - high alarm	1 - low alarm	3 - normal
3rd digit:	alarm status (channel A)	0 - normal	1 - alarm	
4th digit:	alarm status (channel H)	0 - normal	1 - alarm	
5th digit:	battery low voltage alarm	0 - normal	1 - alarm	
6th digit:	sensor type			
	0: temperature	1: temperature & humidity		
	2: AD01 (4-20mA)	3: AD02 (0-5V)	4: D01/D02	
	5: Modbus (G7-MB)	6: temperature & pressure		
	7: Dual Temperature	8: Modbus (G7-MS)		
7th digit:	power mode	0 - low power mode	1 - power mode	
8th digit:	RF module	0 - normal	1 - defect	



12. Complete System Configuration

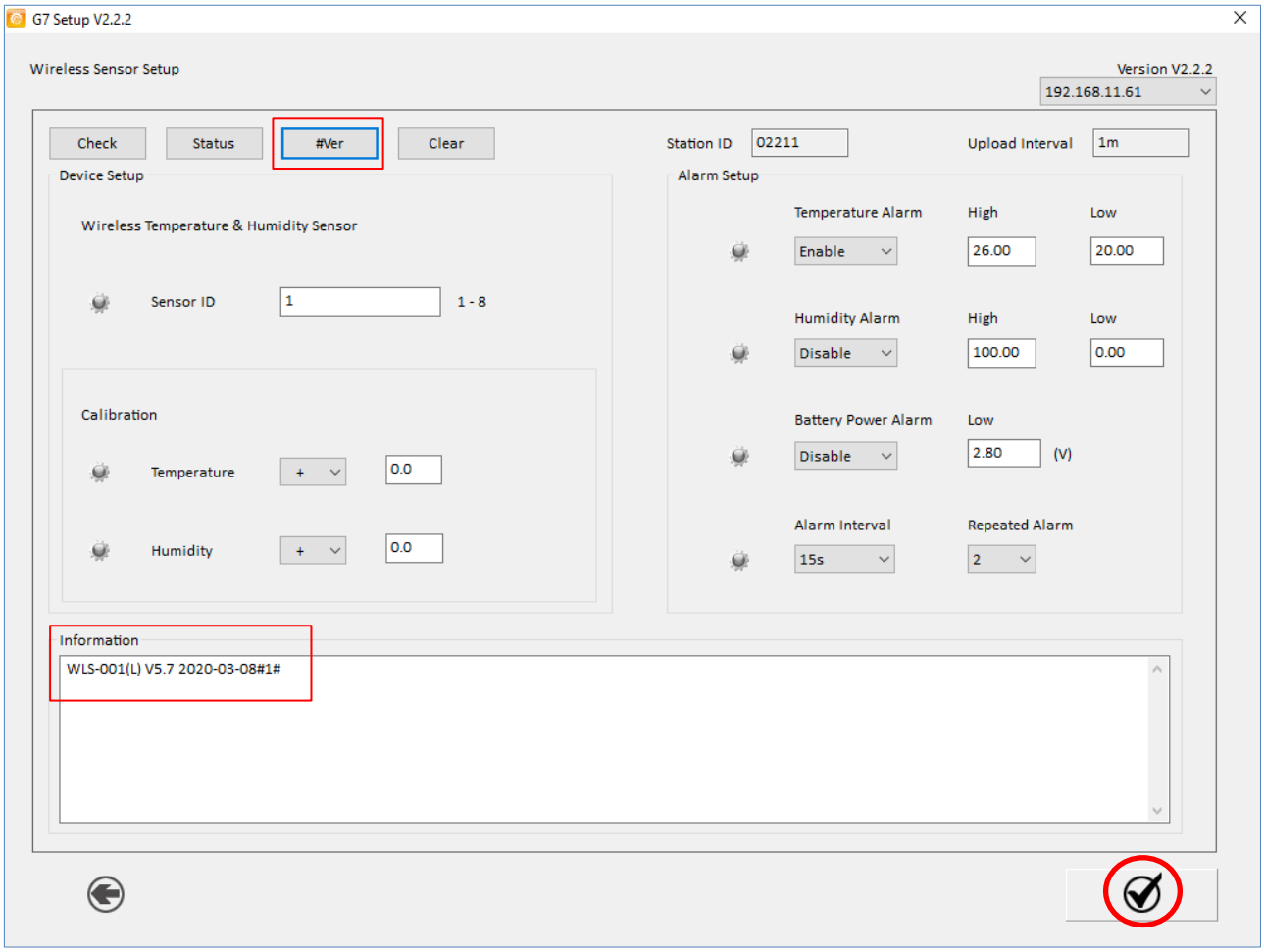
All wireless sensors must be configured one by one with different and unique Sensor ID.

Click [✓] to complete and save the configuration parameters

Disconnect battery and unplug USB adaptor after completing the setup.

ⓘ Disconnect battery before unplug USB adaptor.

Connect the battery again and leave the wireless sensor running.



Buttons features:

[Check] display all the parameters successfully configured in the sensor

[Status] display the live data

[#Ver] check the sensor hardware version

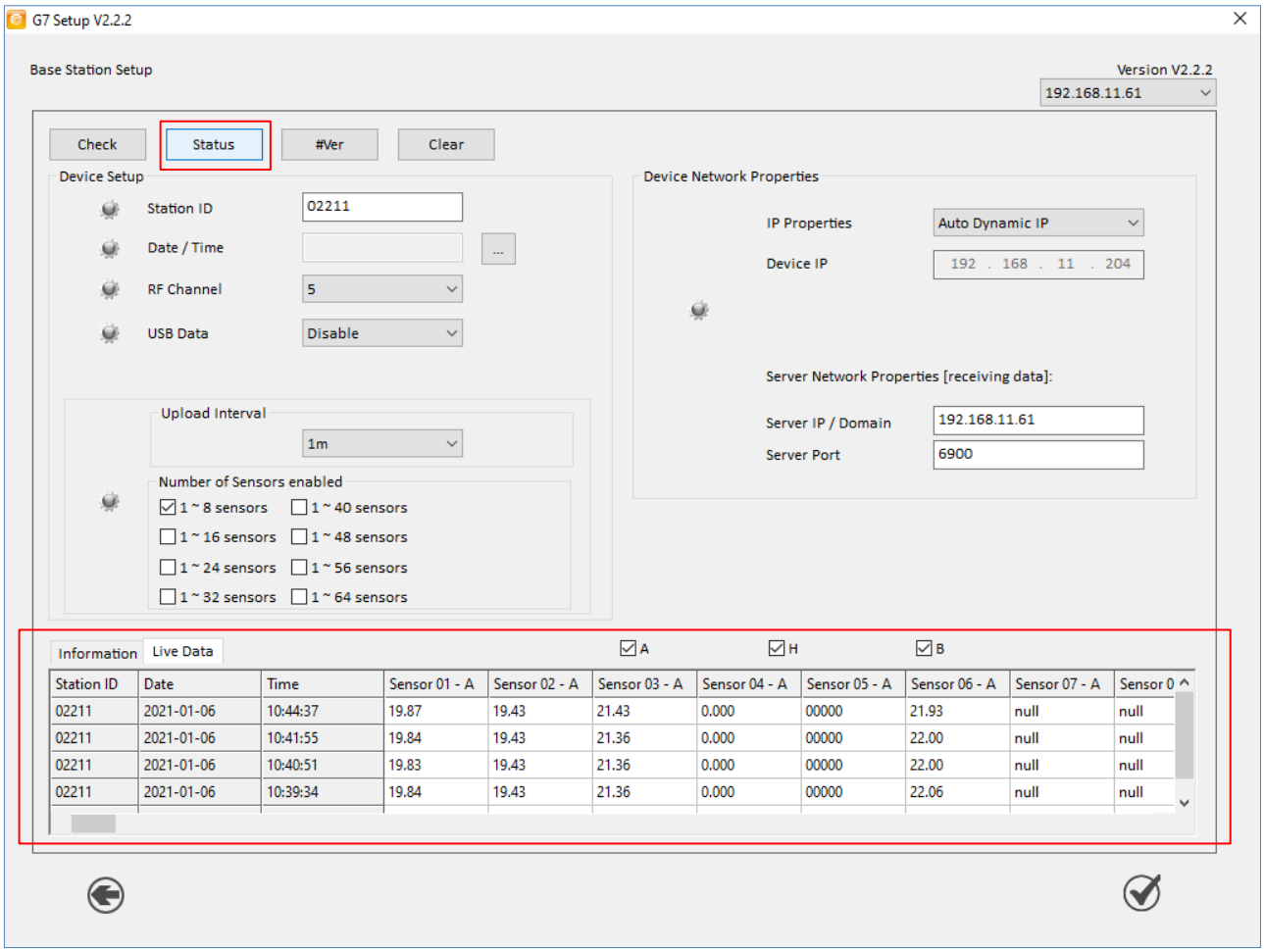
[Clear] clear the display of all settings

12. Checking Wireless Data

1) After proper setting up base station and wireless sensors, run the Setup Software again.
   - Disconnect USB adaptor from all wireless sensors
   - Connect Base Station to network
   - Run the G7 Setup Software

2) Select base station and Click [ ] to establish connection (refer to section 6.1)

3) Click “Status” to check the live wireless data.
   One set of data including all sensors reading will be retrieved each time when “Status” is clicked.



4) Click “A” displays Sensor – A > displays temperature, AD1, or D01 according to sensor type.

5) Click “H” displays Sensor – H > displays humidity, AD2, or D02 according to sensor type.

6) Click “B” displays Sensor – B > displays sensor battery level.

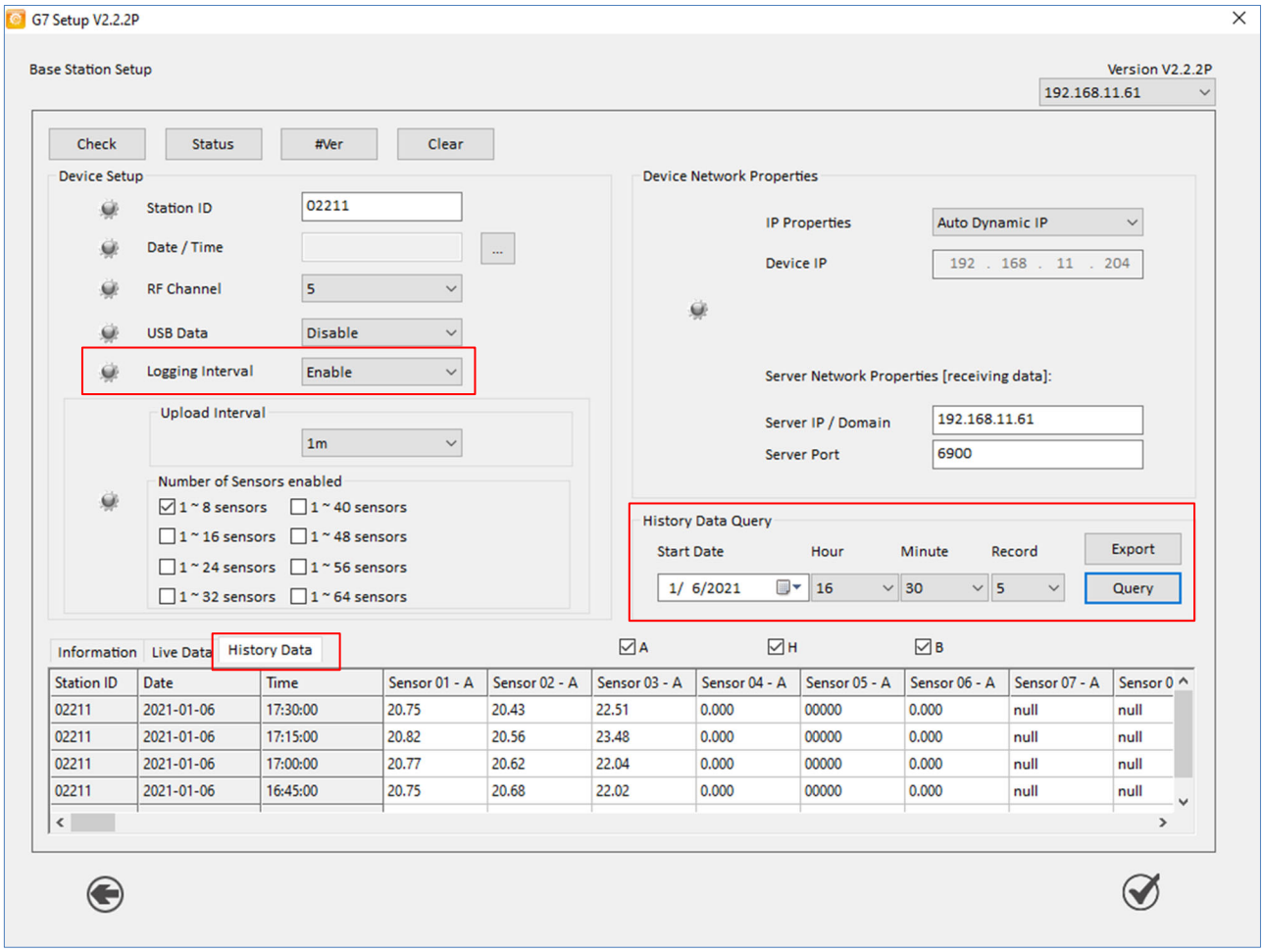
Channel	G7-T2/H2/HA	G7-AD	G7-D2	G7-LK	G7-MB	G7-TP	G7-DT	G7-MS
A	Temperature	AD1: 4-20mA	D01: NO	--	Floating Point	Temp	Temp	Floating Point
H	Humidity	AD2: 0-5V	D02: NO	Water Leak	Integer	Pressure	Temp	Floating Point

Internal Data Logging (only available in model: G7-BS+)

(1) **G7-BS+** Base Station is integrated with 4MB memory storing up to 30000 data records.

(2) Logging Interval is fixed at 15 min.

(3) Setup Software can retrieve the logged data and export to excel file for local backup.



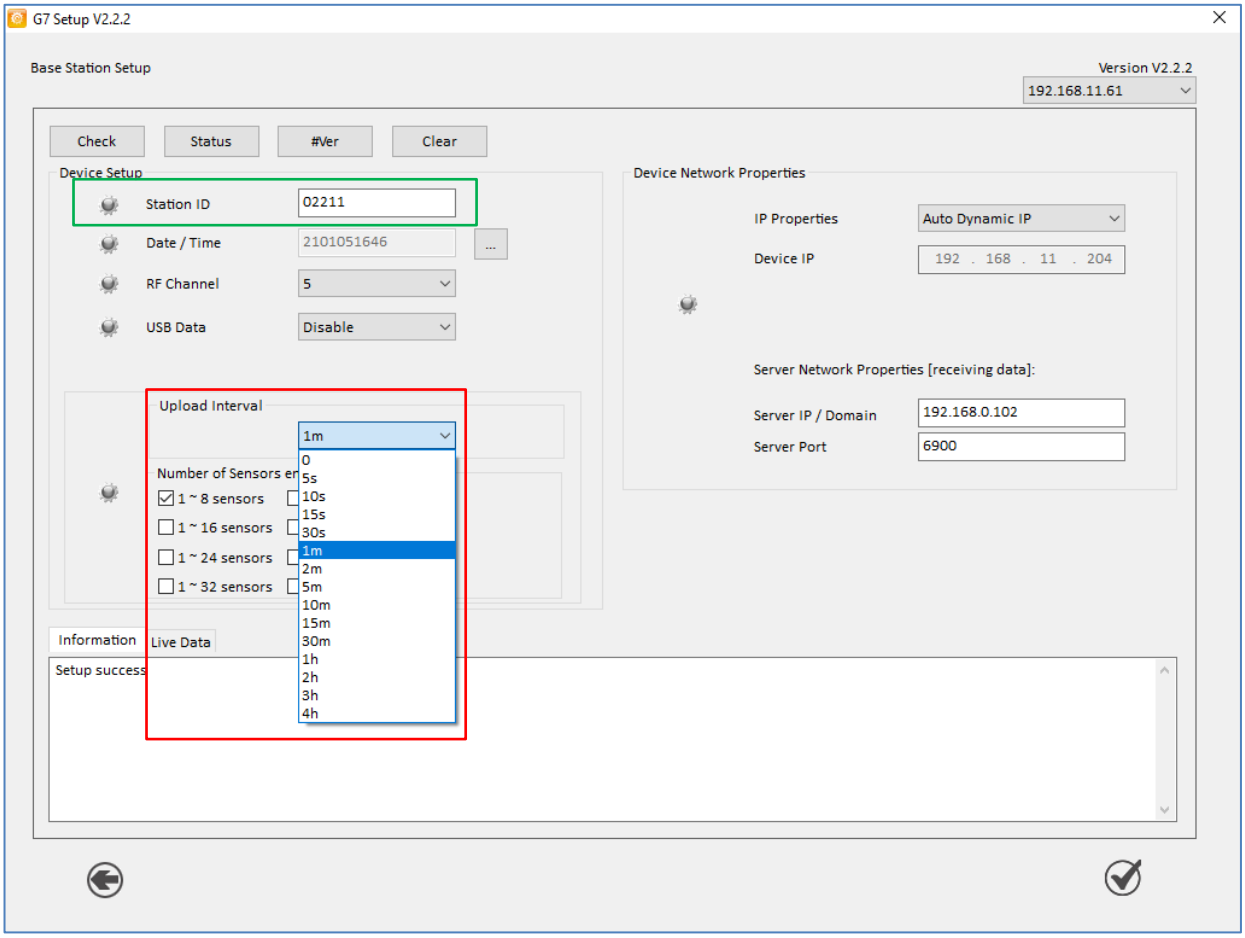
13. Configuration Change

* Whenever there is any change of RF Channel and Upload Interval in base station, all associated wireless sensors must be re-assigned to the base station.
* These two parameters in base station and wireless sensors will automatically be matched when the wireless sensors are re-assigned to that base station.

Change of upload intervals

(1) Base Station

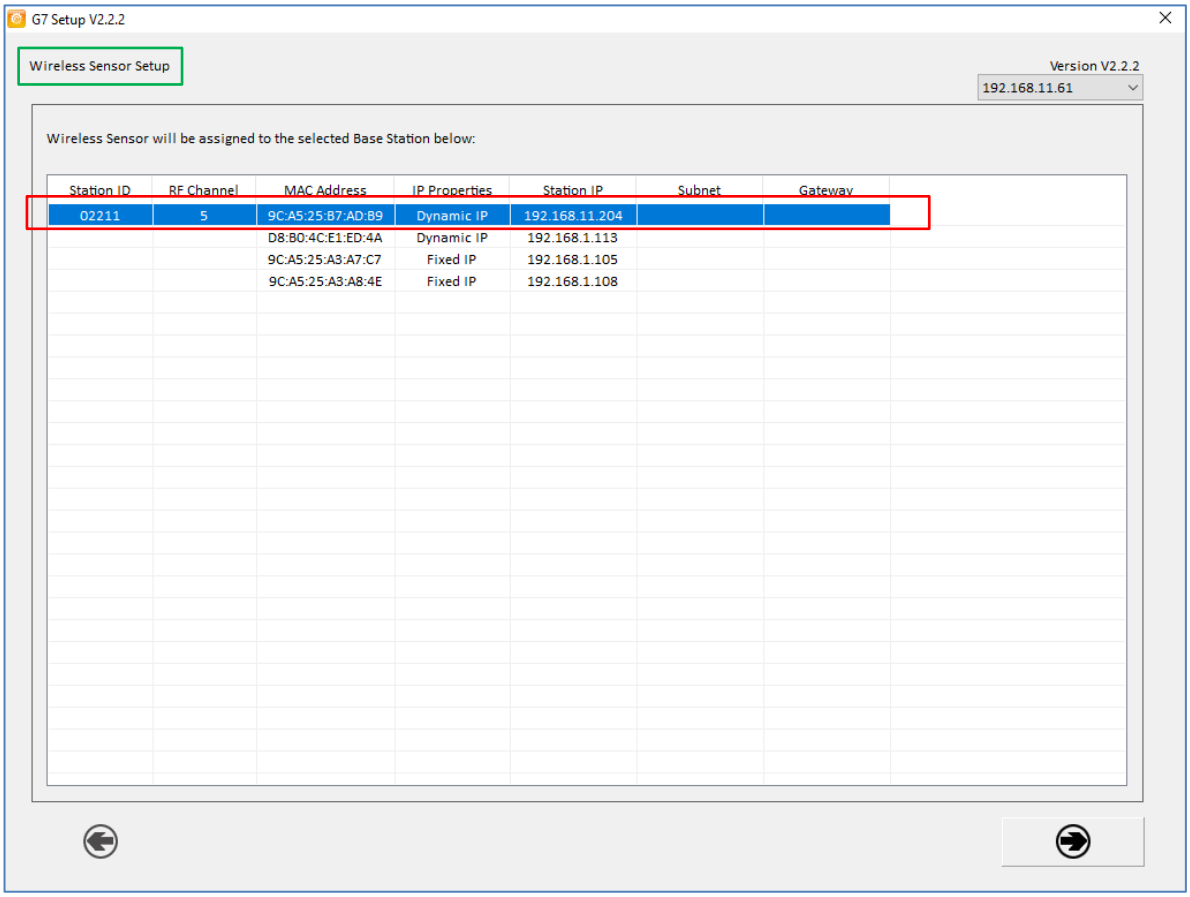
- Change of upload interval in Base Station Setup



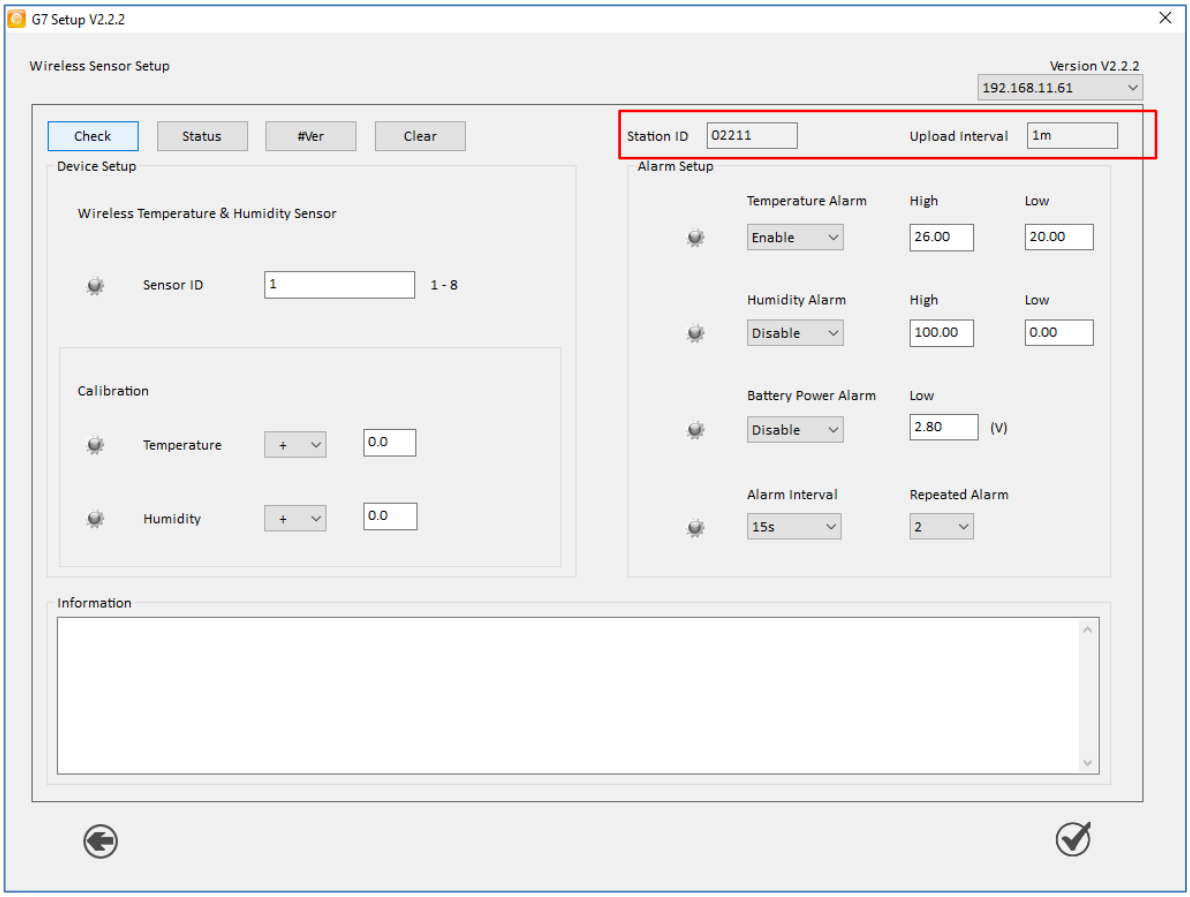
(2) Wireless Sensors

- Sensor upload interval is changed by re-assignment of wireless sensors to the base station
- Upload interval and RF Channel will then be set into the sensor same as base station automatically

- Assign the sensors to the base station



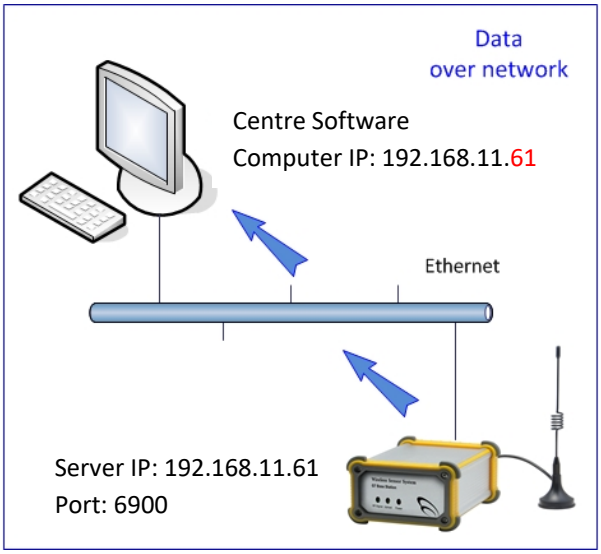
- Click [ ] to save the setting



14. Data over LAN

Network Setting

Please check carefully your local network and router configuration:



In the example case of this manual:

A) Base Station configuration as below.

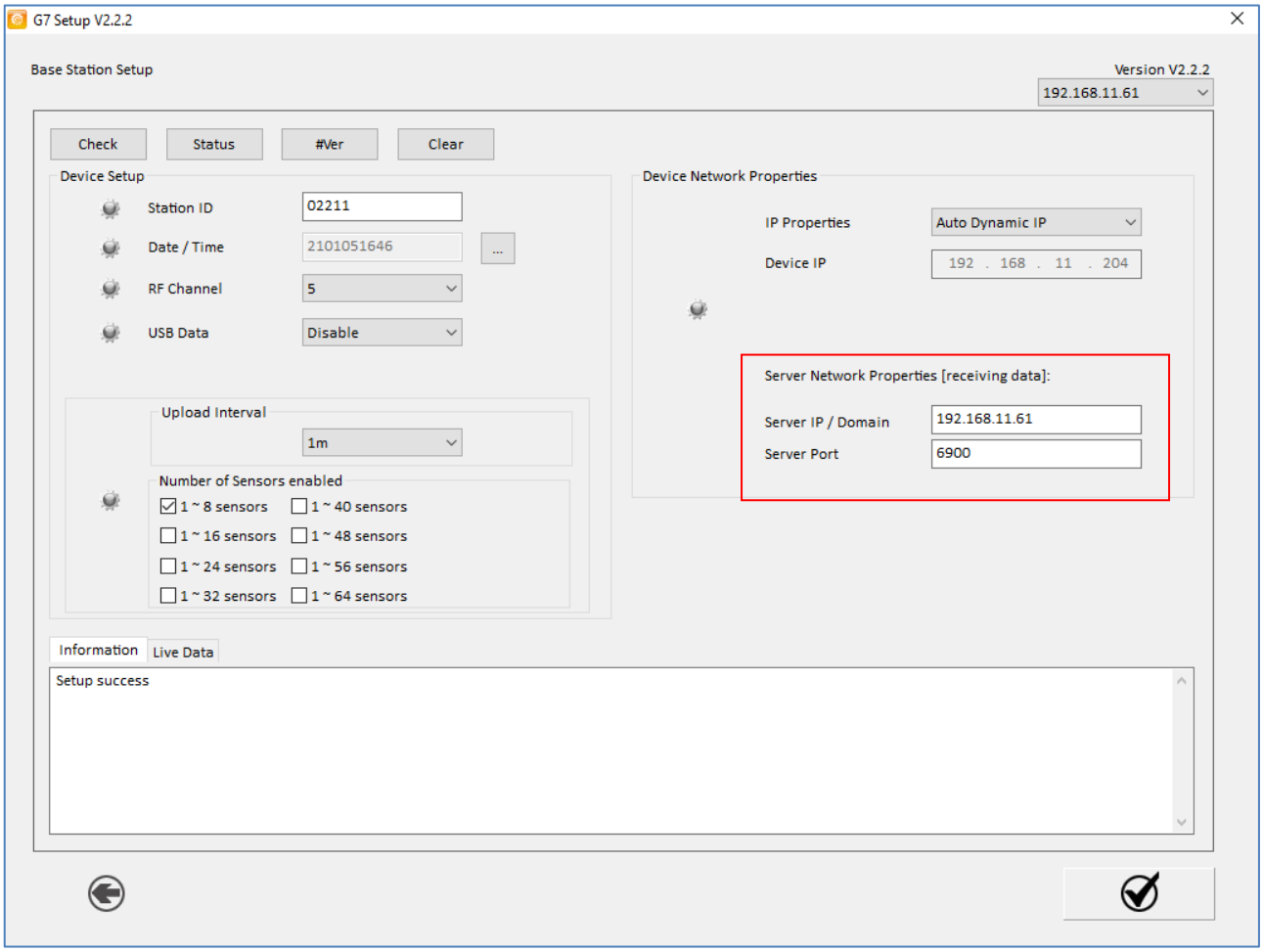
Server IP:	192.168.11.61
Server Port:	6900

B) G7 Centre Software - local IP & Port configured as Server.

Centre Computer IP:	192.168.11.61
Local Port:	6900

Note: all the ports above must be opened in router.

G7 Setup – Base Station

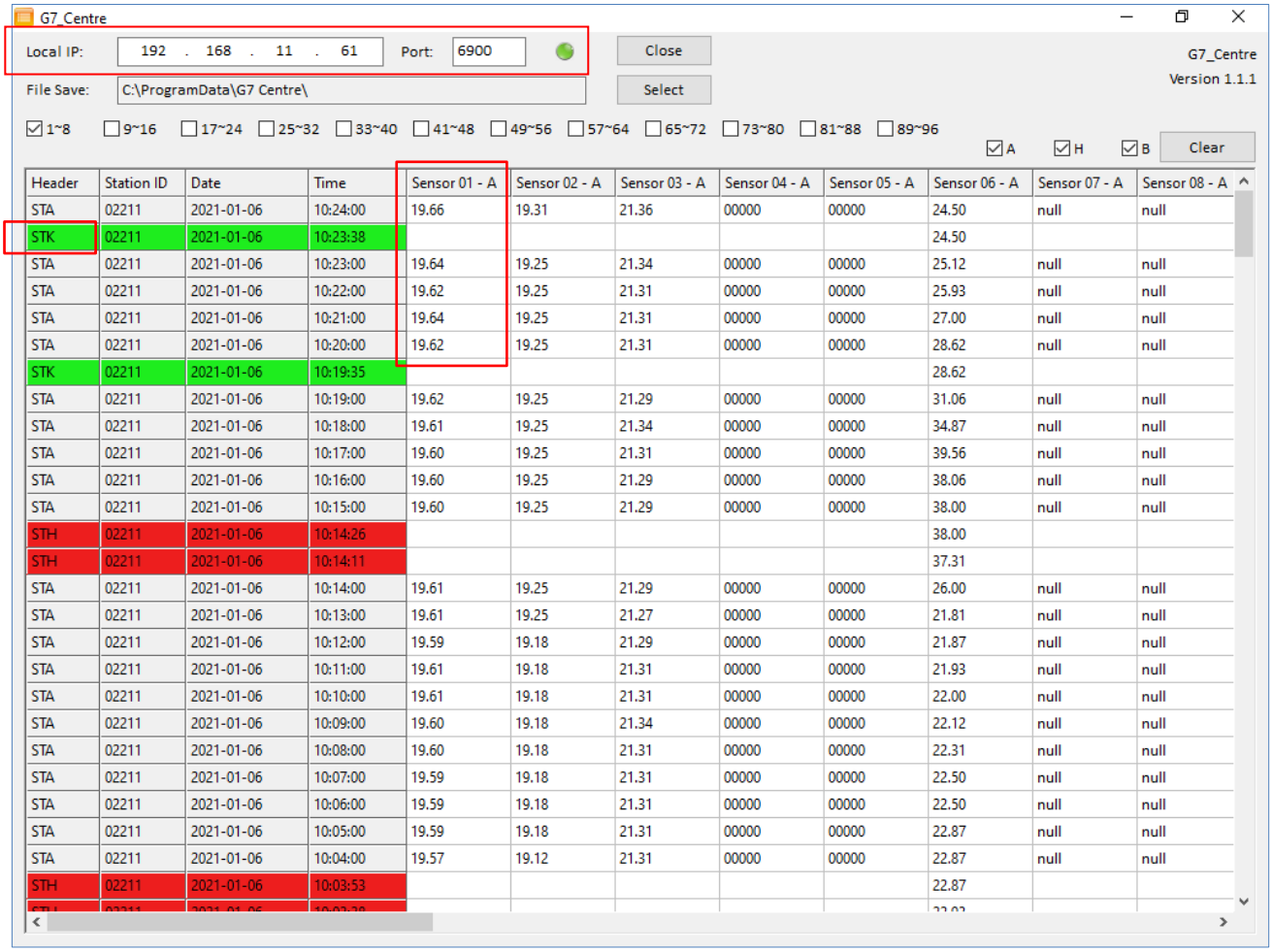


Base Station IP must be in the same network to the computer running Setup and Centre Software.

G7 Centre – receiving data

Header

- STA Normal Data upload in interval
- STH Alarm Data
- STK Resume Normal Data



Header	Station ID	Date	Time	Sensor 01 - A	Sensor 02 - A	Sensor 03 - A	Sensor 04 - A	Sensor 05 - A	Sensor 06 - A	Sensor 07 - A	Sensor 08 - A
STA	02211	2021-01-06	10:24:00	19.66	19.31	21.36	00000	00000	24.50	null	null
STK	02211	2021-01-06	10:23:38						24.50		
STA	02211	2021-01-06	10:23:00	19.64	19.25	21.34	00000	00000	25.12	null	null
STA	02211	2021-01-06	10:22:00	19.62	19.25	21.31	00000	00000	25.93	null	null
STA	02211	2021-01-06	10:21:00	19.64	19.25	21.31	00000	00000	27.00	null	null
STA	02211	2021-01-06	10:20:00	19.62	19.25	21.31	00000	00000	28.62	null	null
STK	02211	2021-01-06	10:19:35						28.62		
STA	02211	2021-01-06	10:19:00	19.62	19.25	21.29	00000	00000	31.06	null	null
STA	02211	2021-01-06	10:18:00	19.61	19.25	21.34	00000	00000	34.87	null	null
STA	02211	2021-01-06	10:17:00	19.60	19.25	21.31	00000	00000	39.56	null	null
STA	02211	2021-01-06	10:16:00	19.60	19.25	21.29	00000	00000	38.06	null	null
STA	02211	2021-01-06	10:15:00	19.60	19.25	21.29	00000	00000	38.00	null	null
STH	02211	2021-01-06	10:14:26						38.00		
STH	02211	2021-01-06	10:14:11						37.31		
STA	02211	2021-01-06	10:14:00	19.61	19.25	21.29	00000	00000	26.00	null	null
STA	02211	2021-01-06	10:13:00	19.61	19.25	21.27	00000	00000	21.81	null	null
STA	02211	2021-01-06	10:12:00	19.59	19.18	21.29	00000	00000	21.87	null	null
STA	02211	2021-01-06	10:11:00	19.61	19.18	21.31	00000	00000	21.93	null	null
STA	02211	2021-01-06	10:10:00	19.61	19.18	21.31	00000	00000	22.00	null	null
STA	02211	2021-01-06	10:09:00	19.60	19.18	21.34	00000	00000	22.12	null	null
STA	02211	2021-01-06	10:08:00	19.60	19.18	21.31	00000	00000	22.31	null	null
STA	02211	2021-01-06	10:07:00	19.59	19.18	21.31	00000	00000	22.50	null	null
STA	02211	2021-01-06	10:06:00	19.59	19.18	21.31	00000	00000	22.50	null	null
STA	02211	2021-01-06	10:05:00	19.59	19.18	21.31	00000	00000	22.87	null	null
STA	02211	2021-01-06	10:04:00	19.57	19.12	21.31	00000	00000	22.87	null	null
STH	02211	2021-01-06	10:03:53						22.87		

STH and STK only display the sensor data with alarm.

Channel	G7-T2/H2/HA	G7-AD	G7-D2	G7-LK	G7-MB	G7-TP	G7-DT	G7-MS
A	Temperature	AD1: 4-20mA	D01: NO	--	Floating Point	Temp	Temp	Floating Point
H	Humidity	AD2: 0-5V	D02: NO	Water Leak	Integer	Pressure	Temp	Floating Point
B	Battery Voltage							

G7-D2 Wireless Digital Alarm Input

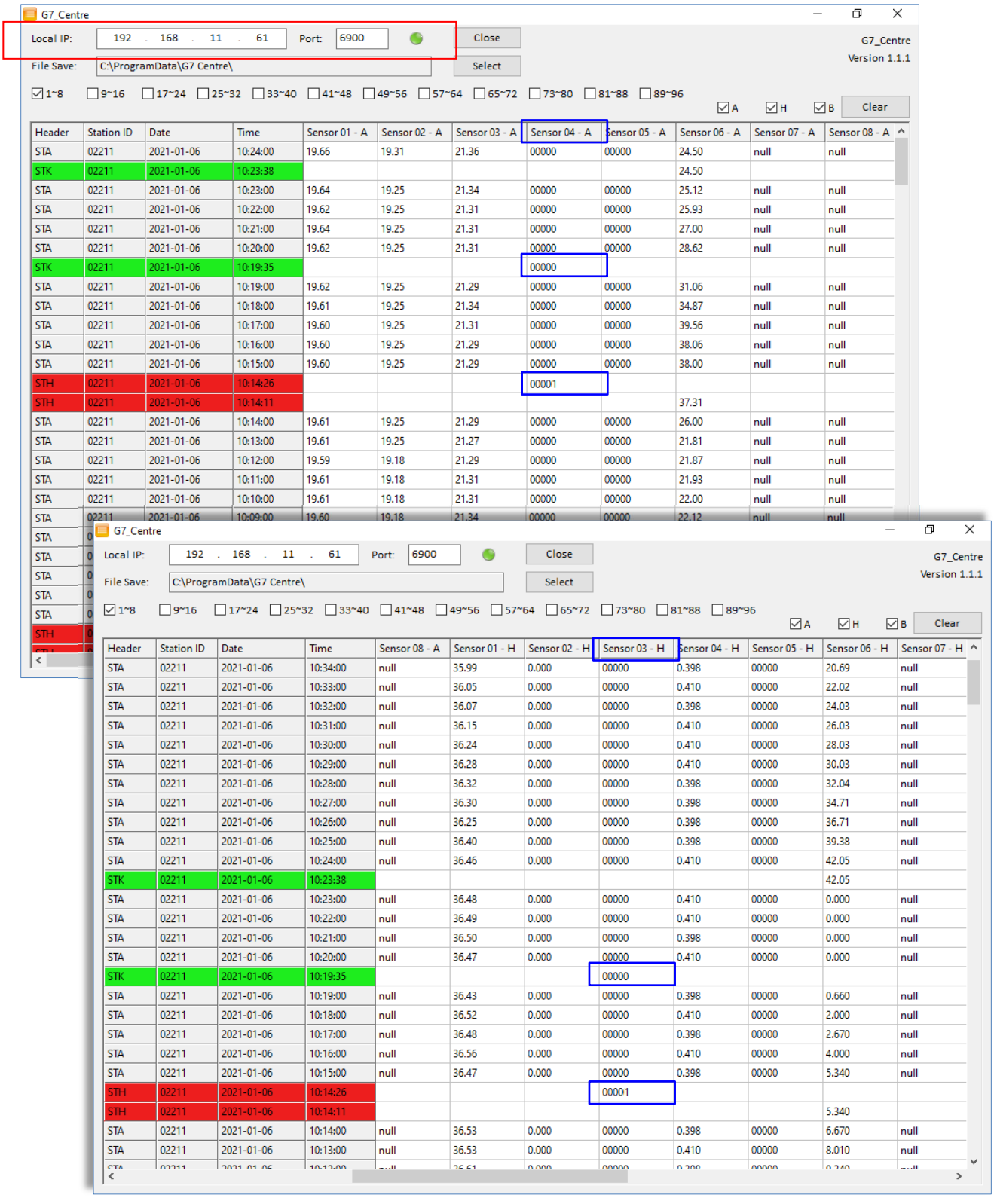
In this example:

Sensor 01-A means digital alarm input 1 of Sensor ID: 01

Sensor 01-H means digital alarm input 2 of Sensor ID: 01

00000 means digital input open – normal

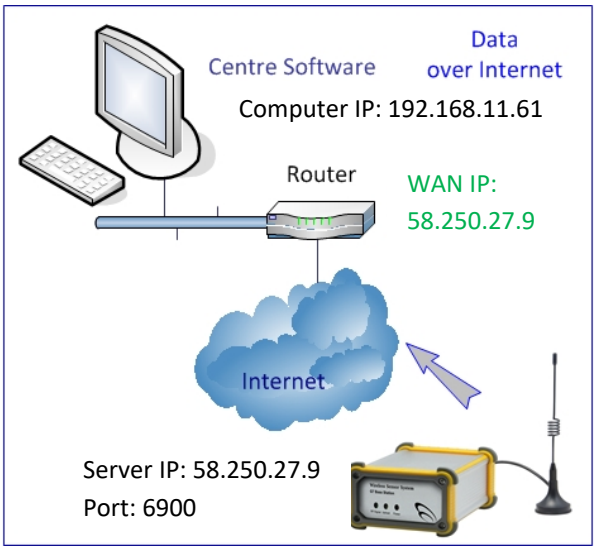
00001 means digital input closed – alarm triggered



15. Data over Internet

A1) Network Setting [Fixed WAN IP]

Please carefully check your local network and router configuration:



In the example case of this manual:

A) Base Station configuration as below.

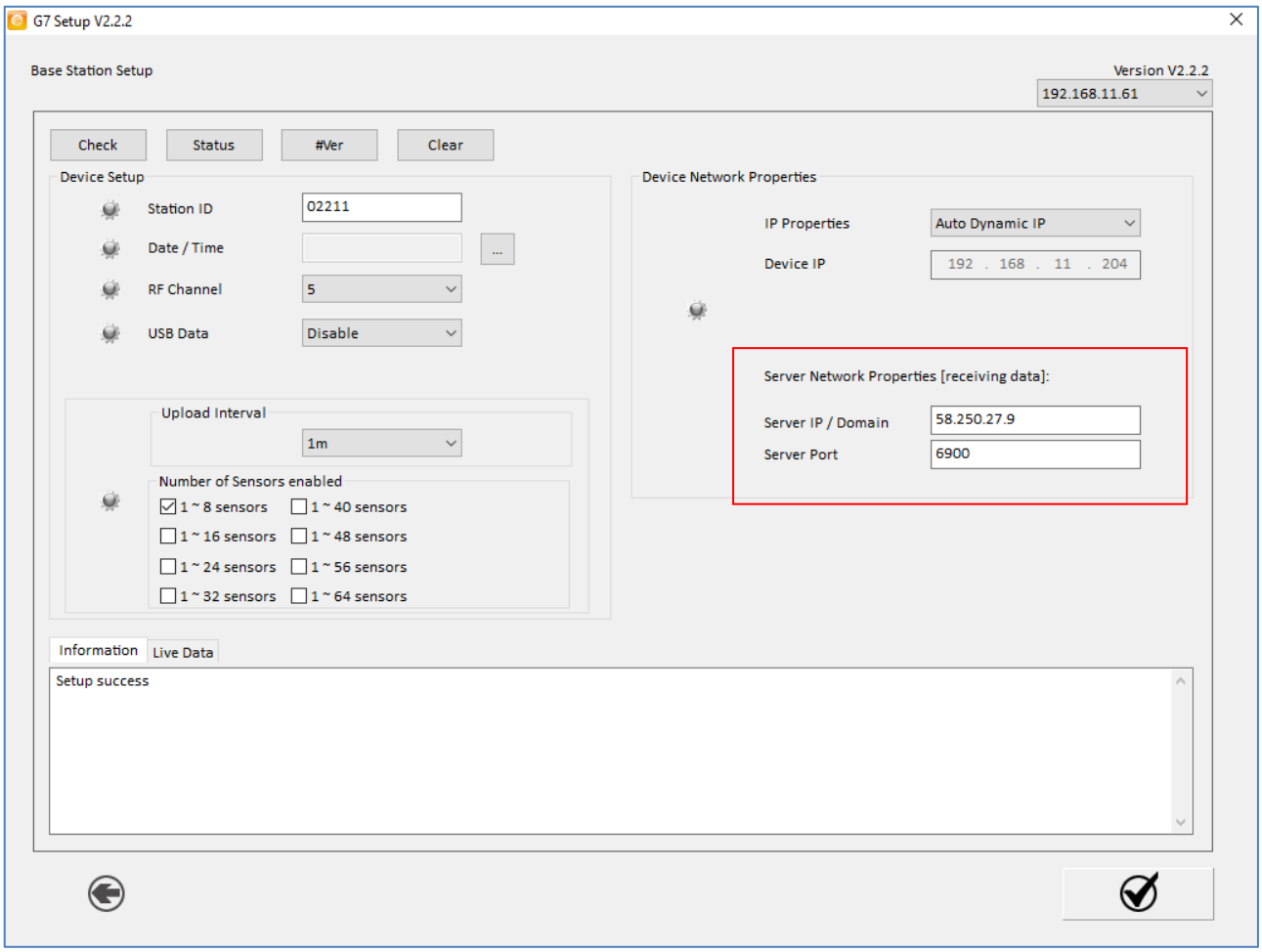
Server IP:	58.250.27.9
Server Port:	6900

B) G7 Centre Software - local IP & Port configured as Server.

Centre Computer IP:	192.168.11.61
Local Port:	6900

Note: all the ports above must be opened in router.

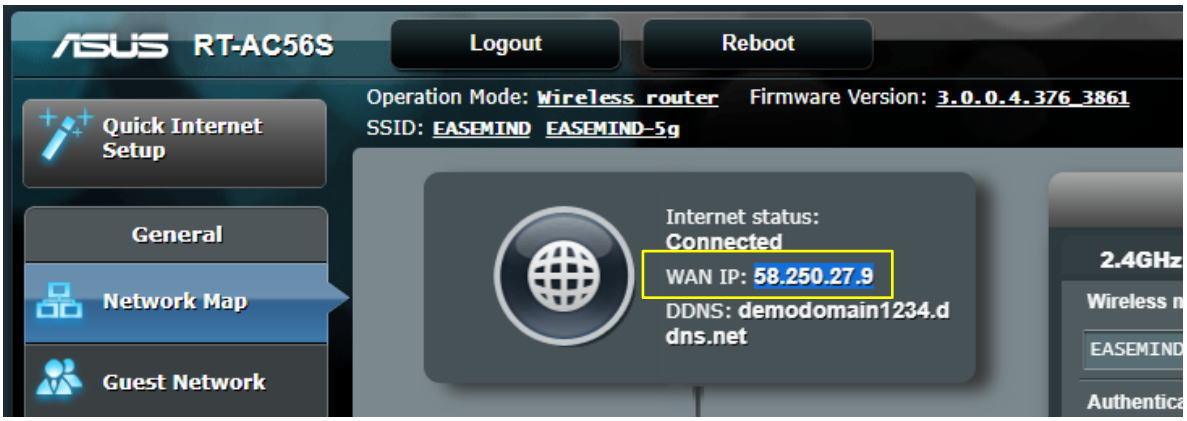
G7 Setup – Base Station



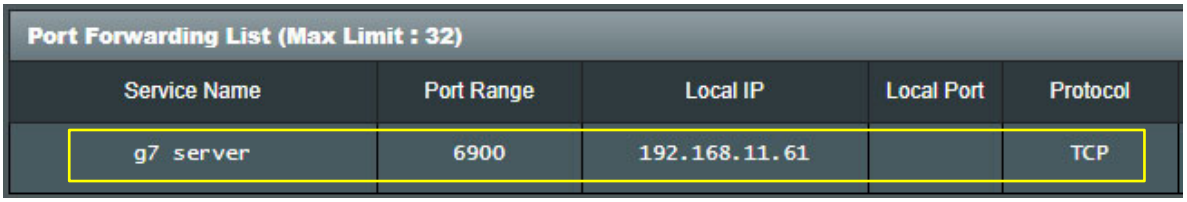
A2) Router Setting

- Router Setting in the Centre Computer Network
- TCP Port must be forwarded to computer running G7 Centre Software

WAN IP:

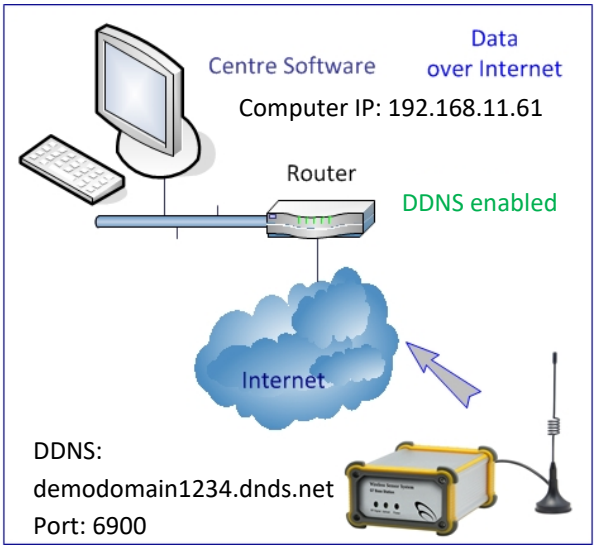


Port Forward:



B1) Network Setting [DDNS]

Please carefully check your local network and router configuration:



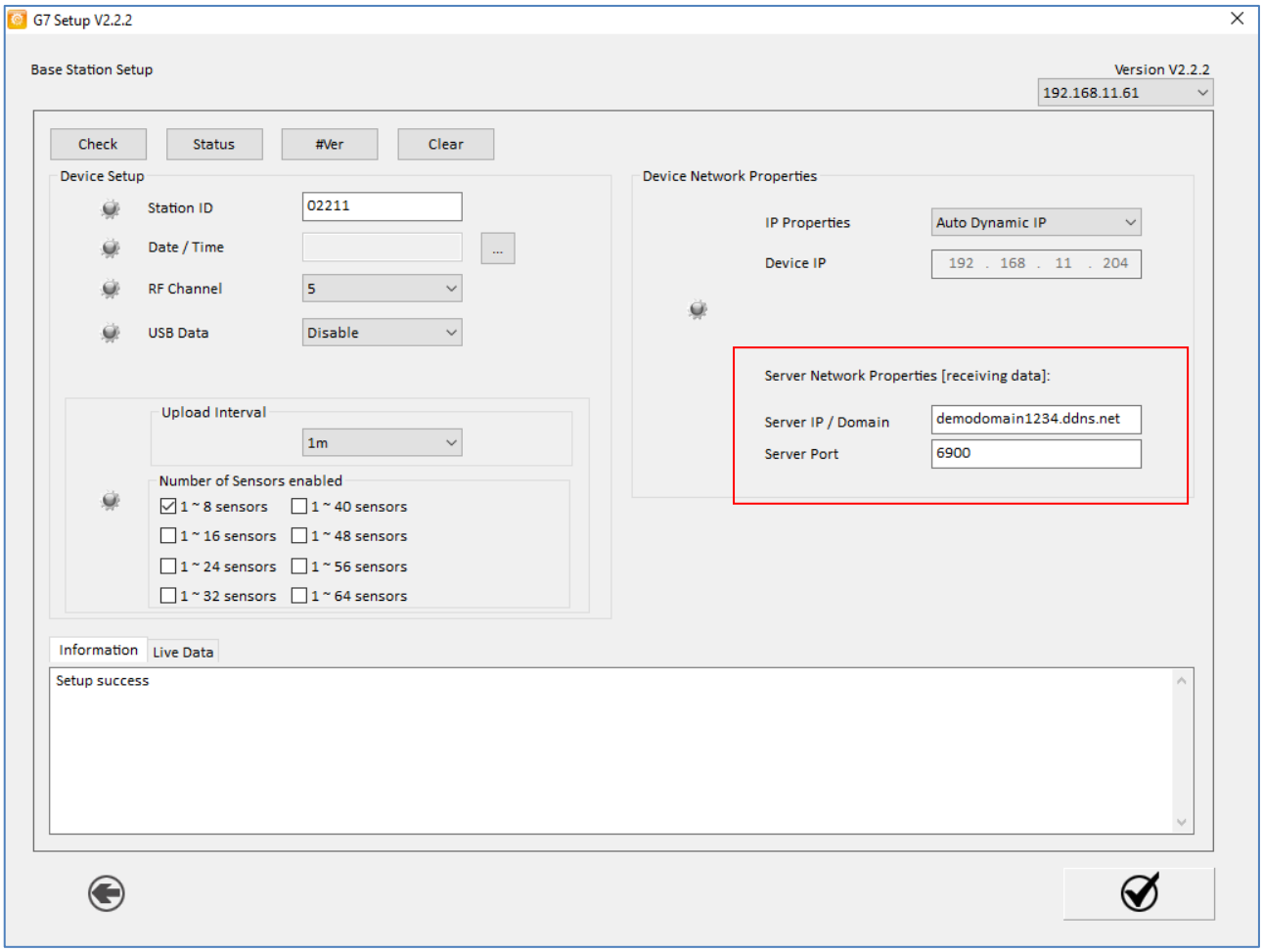
In the example case of this manual:

C) Base Station configuration as below.
Server DDNS: demodomain1234.dnds.net
Server Port: 6900

D) G7 Centre Software - local IP & Port configured as Server.
Centre Computer IP: 192.168.11.61
Local Port: 6900

Note: all the ports above must be opened in router.

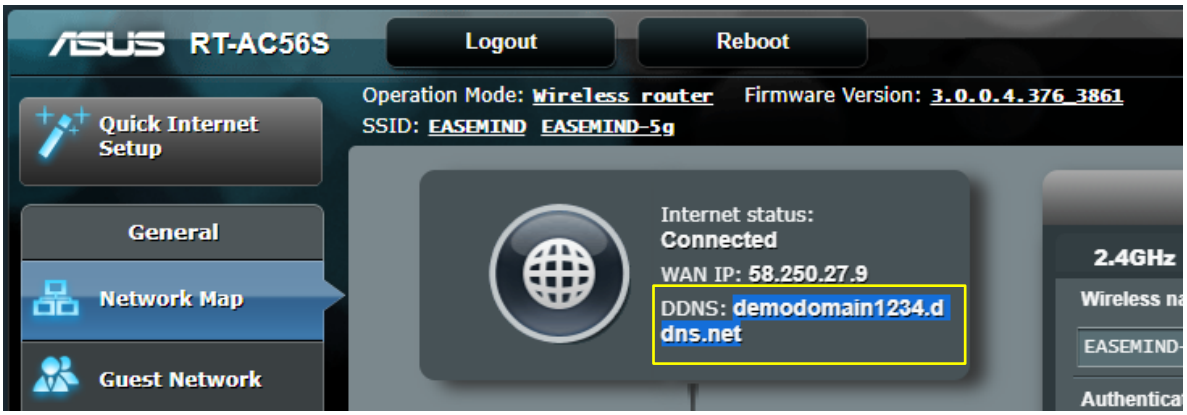
G7 Setup – Base Station



B2) Router Setting

- Router Setting in the Centre Computer Network
- TCP Port must be forwarded to computer running G7 Centre Software

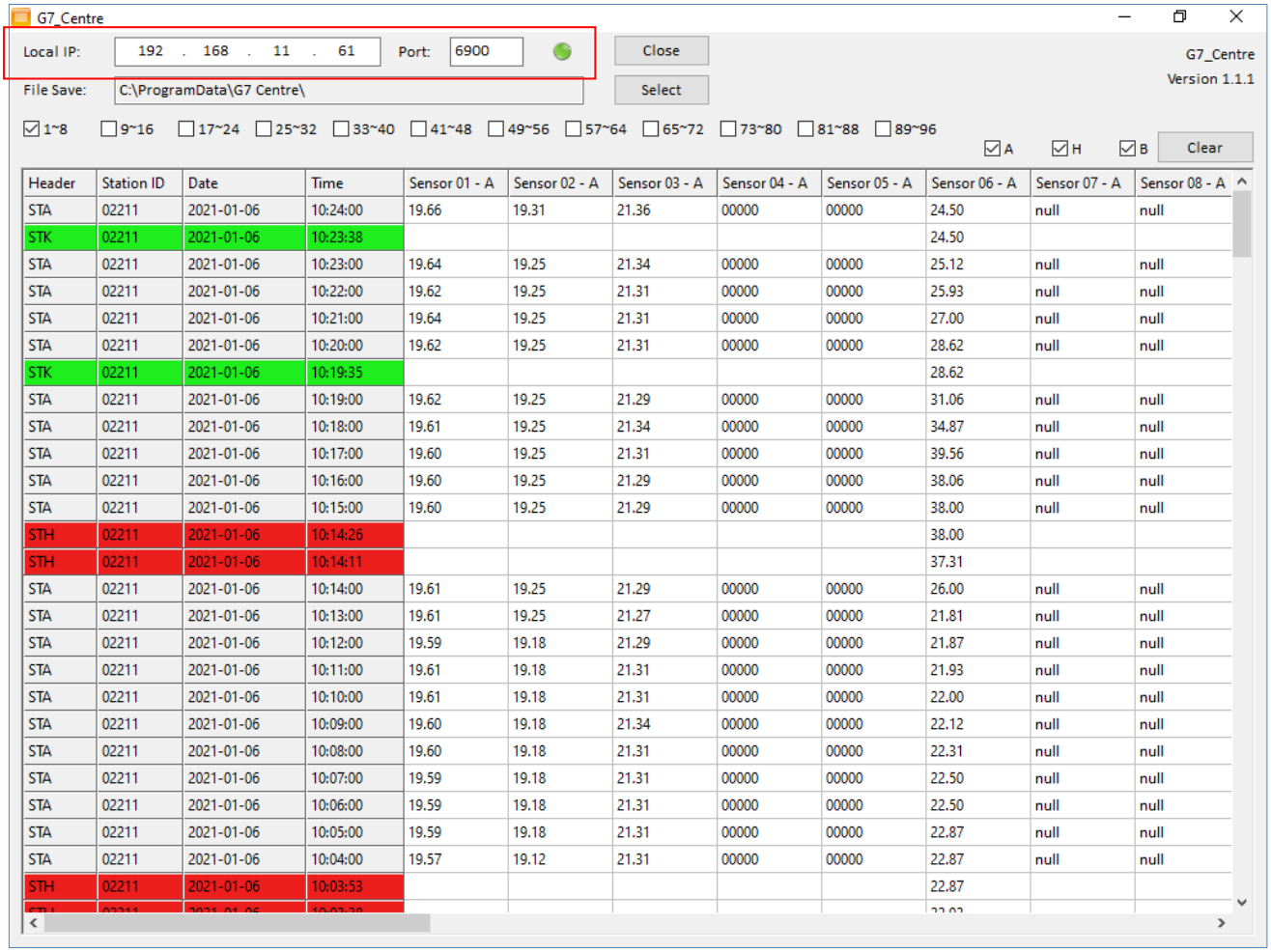
DDNS:



Port Forward:

C1) G7 Centre

Computer with IP: 192.168.11.61 running G7 Centre software will receive data.



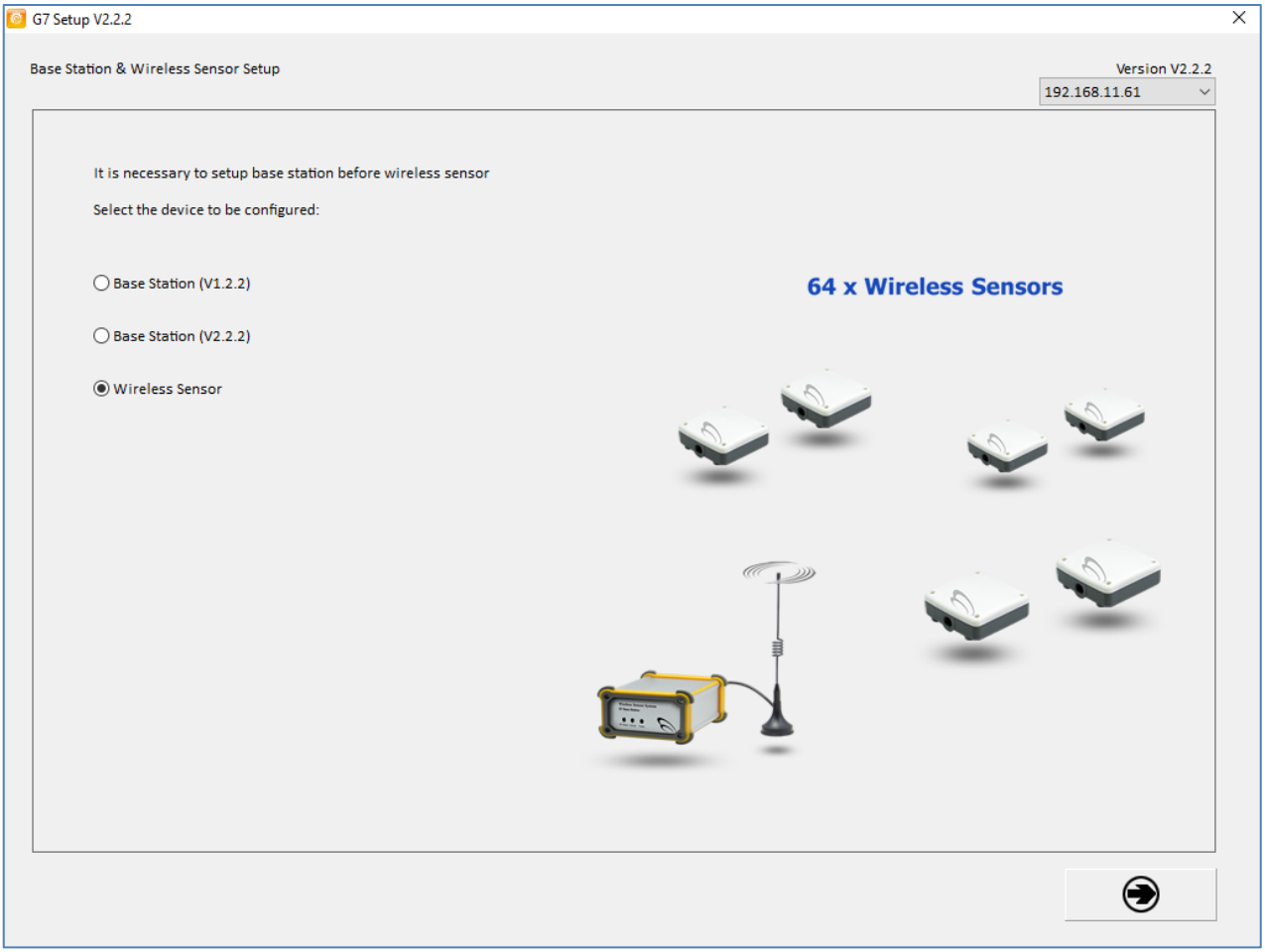
Header	Station ID	Date	Time	Sensor 01 - A	Sensor 02 - A	Sensor 03 - A	Sensor 04 - A	Sensor 05 - A	Sensor 06 - A	Sensor 07 - A	Sensor 08 - A
STA	02211	2021-01-06	10:24:00	19.66	19.31	21.36	00000	00000	24.50	null	null
STK	02211	2021-01-06	10:23:38						24.50		
STA	02211	2021-01-06	10:23:00	19.64	19.25	21.34	00000	00000	25.12	null	null
STA	02211	2021-01-06	10:22:00	19.62	19.25	21.31	00000	00000	25.93	null	null
STA	02211	2021-01-06	10:21:00	19.64	19.25	21.31	00000	00000	27.00	null	null
STA	02211	2021-01-06	10:20:00	19.62	19.25	21.31	00000	00000	28.62	null	null
STK	02211	2021-01-06	10:19:35						28.62		
STA	02211	2021-01-06	10:19:00	19.62	19.25	21.29	00000	00000	31.06	null	null
STA	02211	2021-01-06	10:18:00	19.61	19.25	21.34	00000	00000	34.87	null	null
STA	02211	2021-01-06	10:17:00	19.60	19.25	21.31	00000	00000	39.56	null	null
STA	02211	2021-01-06	10:16:00	19.60	19.25	21.29	00000	00000	38.06	null	null
STA	02211	2021-01-06	10:15:00	19.60	19.25	21.29	00000	00000	38.00	null	null
STH	02211	2021-01-06	10:14:26						38.00		
STH	02211	2021-01-06	10:14:11						37.31		
STA	02211	2021-01-06	10:14:00	19.61	19.25	21.29	00000	00000	26.00	null	null
STA	02211	2021-01-06	10:13:00	19.61	19.25	21.27	00000	00000	21.81	null	null
STA	02211	2021-01-06	10:12:00	19.59	19.18	21.29	00000	00000	21.87	null	null
STA	02211	2021-01-06	10:11:00	19.61	19.18	21.31	00000	00000	21.93	null	null
STA	02211	2021-01-06	10:10:00	19.61	19.18	21.31	00000	00000	22.00	null	null
STA	02211	2021-01-06	10:09:00	19.60	19.18	21.34	00000	00000	22.12	null	null
STA	02211	2021-01-06	10:08:00	19.60	19.18	21.31	00000	00000	22.31	null	null
STA	02211	2021-01-06	10:07:00	19.59	19.18	21.31	00000	00000	22.50	null	null
STA	02211	2021-01-06	10:06:00	19.59	19.18	21.31	00000	00000	22.50	null	null
STA	02211	2021-01-06	10:05:00	19.59	19.18	21.31	00000	00000	22.87	null	null
STA	02211	2021-01-06	10:04:00	19.57	19.12	21.31	00000	00000	22.87	null	null
STH	02211	2021-01-06	10:03:53						22.87		

16. Adding Wireless Sensor

16.1 Setup new wireless sensor

Max. 64 wireless sensors can be assigned to one single base station.

Connect USB adaptor to the sensor, and run “G7 Setup” software to configure new sensor



16.2 Assign Base Station

Setup Software saves all parameters of base stations configured previously. When new sensor is added to the base station, Setup Software will retrieve parameters of selected base station and configure into the sensor.

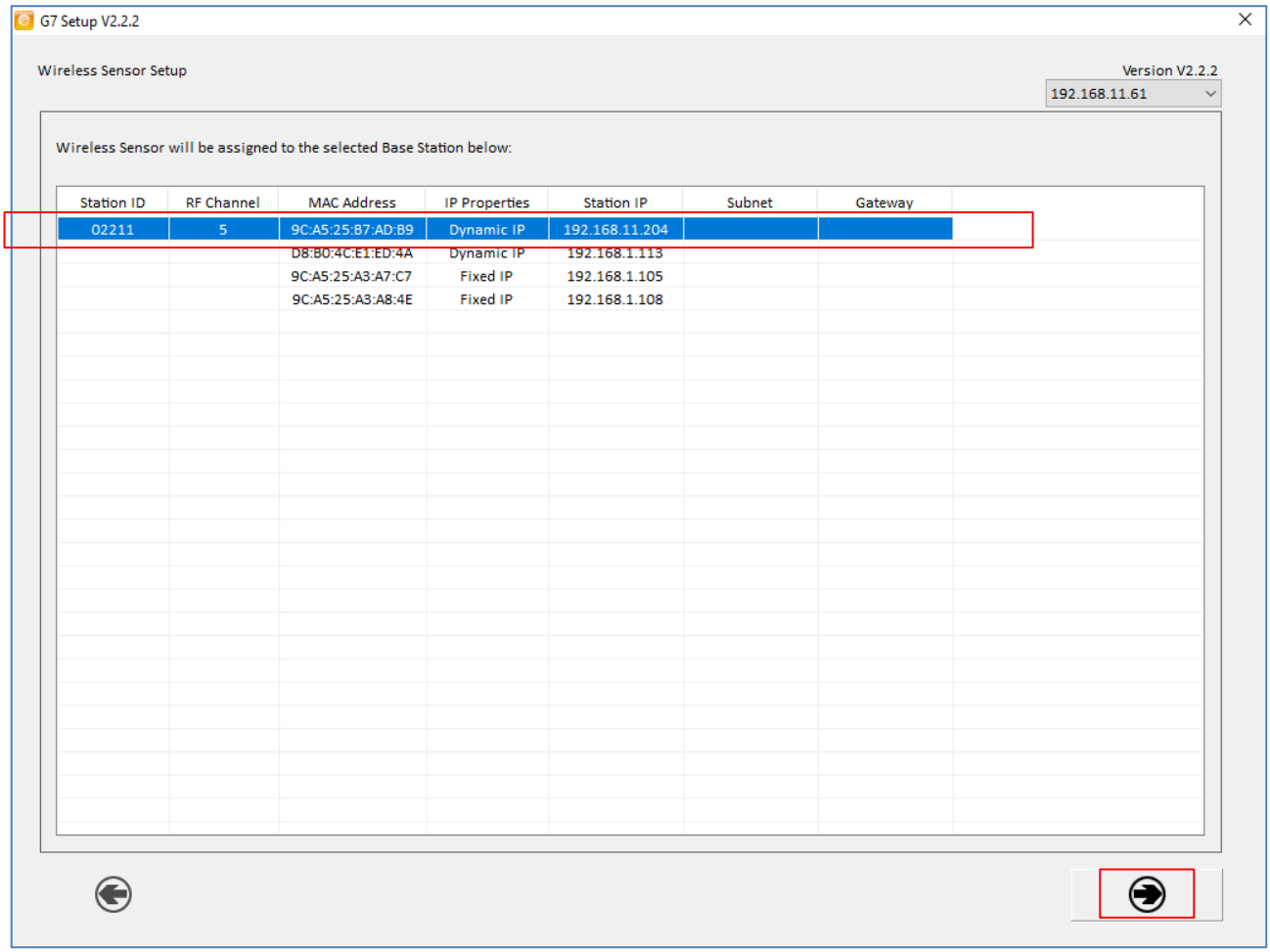
Therefore, users do not need to connect the base station on site when new sensor is added. New sensor can be configured in office and then installed on site.

* With “Station ID & RF Channel” display, that base station is previously found in the network and configured by the setup computer properly.
* Without “Station ID & RF Channel” display, that base station is previously found in the network but not configured by the setup computer yet.

(1) Select the Base Station which will receive data from this new sensor

(2) Only those base stations with “Station ID & RF Channel” display are valid

(3) Click [ ] button



16.3 Configure Sensor Properties

(1) Sensor ID must be configured:

- If this is the second sensor, enter the Sensor ID: 2.
- **No duplicate Sensor ID is allowed!**

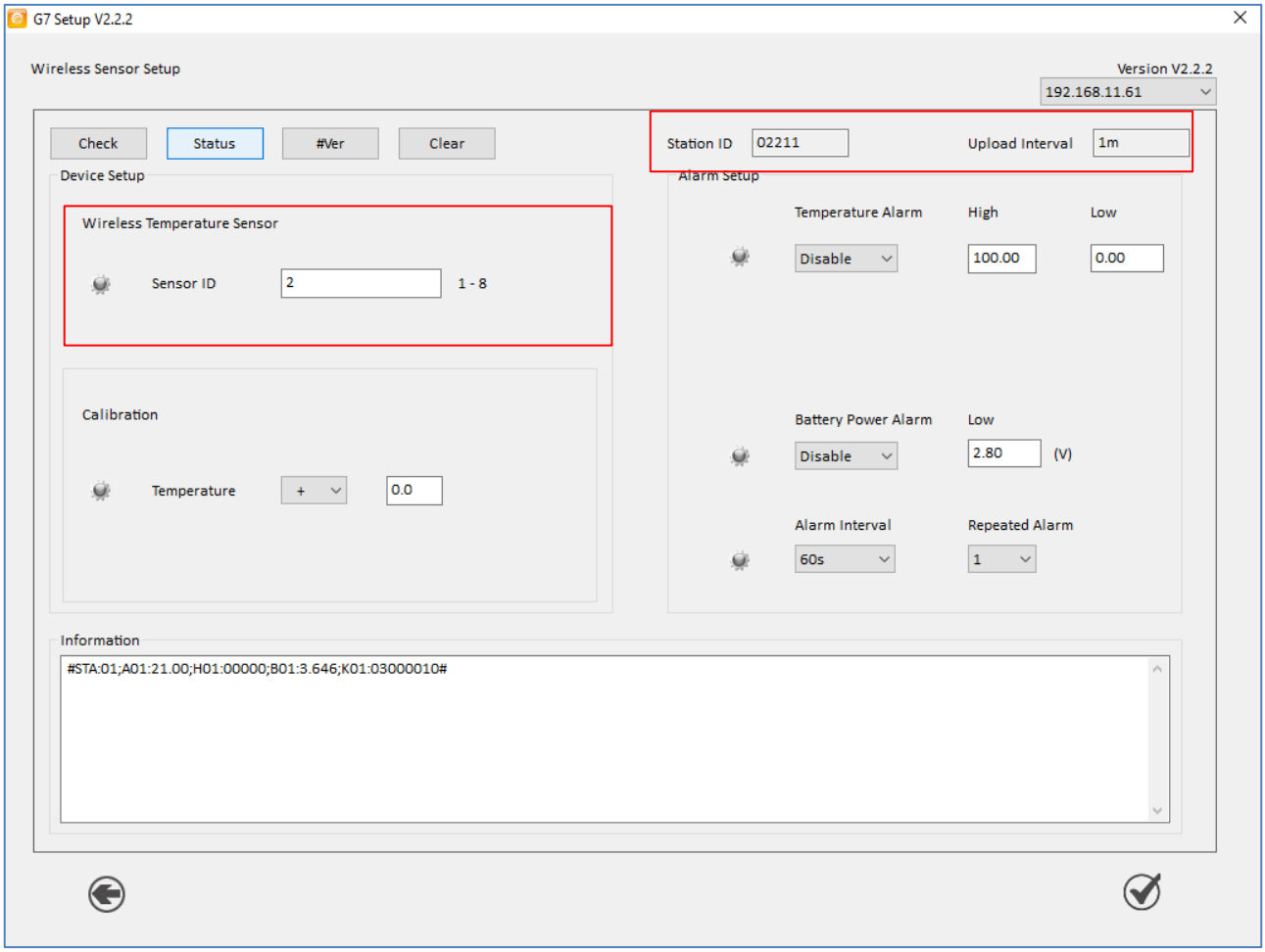
(2) Sensor Type will be automatically detected:

G7-T2, G7-TX	Sensor Type: Temperature Sensor
G7-H2, G7-HA	Sensor Type: Temperature & Humidity Sensor
G7-AD	Sensor Type: Analog Sensor
G7-D2	Sensor Type: Digital Alarm Input
G7-LK	Sensor Type: Water Leakage Detector
G7-TP	Sensor Type: Temperature & Pressure Sensor

(3) Click "Status" to check the sensor reading for verification

* A01: temperature / analog 4-20mA / digital D01
* H01: humidity / analog 0-5V / digital D02
* B01: battery voltage

(4) Click [ ] to complete and save the configuration parameters



17. Bundled Software

1) Click [✓] to complete and save the configuration parameters
2) Base Station will start to upload data only after closing Setup Software
3) Make sure that Setup is closed before running Centre or Client Software
4) Either Centre or Client Software should be run to receive data, but NOT both.

G7 Centre Software

- Receive data and save into text file
- Support max. 99 base stations simultaneous data download
- Only data listing but no graphic chart is displayed
- Mainly for testing wireless data only

G7 MB Client Lite Software

- Receive data and save into database in background
- Support max. 2 base stations simultaneous data download [free version]
- Both data listing and graphic chart can be displayed
- Support temperature, humidity, analog, pressure, Modbus and battery alarm
- Mainly for small scale solution

G7-D2 Alarm Dashboard

- Support G7-D2 only
- Receive data and save into text file
- Support max. 99 base stations simultaneous data download
- Live graphic display of digital alarm status
- Real time user alert of triggered digital alarm

Do not run any two or more of above software in the same computer at the same time.

18. Sensor with Relay

(1) G7-T2-R Wireless Temperature Sensor (with Relay)

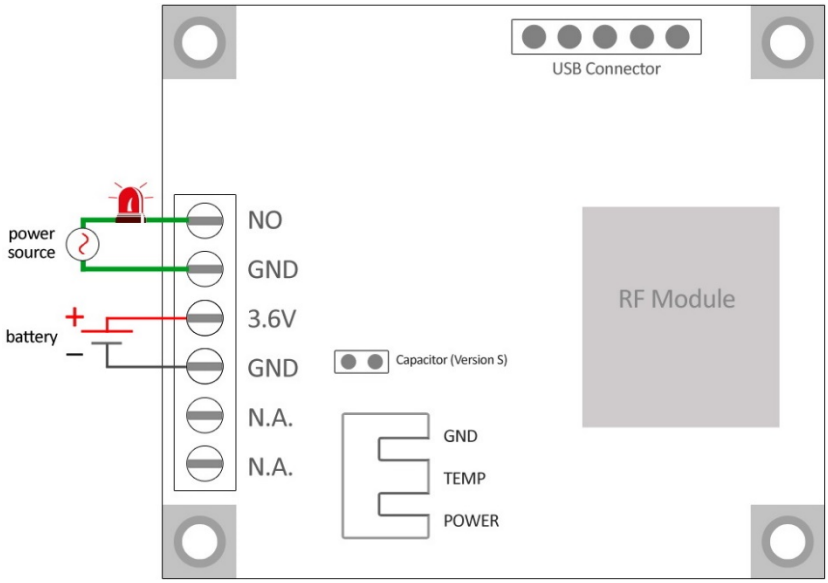
Probe Specification:

- wireless temperature sensor (-55 ~ 125 °C)
- internal battery – 3400mAh
- internal or external RF antenna
- waterproof case, 80 x 80 x 28 mm

Relay Specification:

- NO – normal open, (max. 30V AC or DC, 1A)
- Close (short circuit) triggered by alarm

Wiring of G7-T2-R



When temperature is higher or lower than user preset level:

1. Alarm Data will be sent to base station.
2. Relay will be triggered to ON (closed) for a programmable period.

(2) G7-DT-R Wireless Dual Temperature Sensor (with Relay)

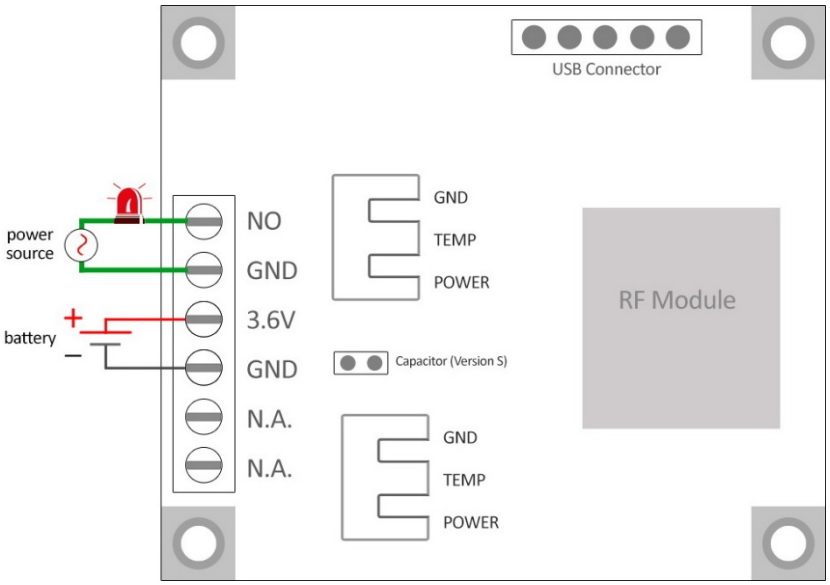
Probe Specification:

- 2 x wireless temperature sensor (-55 ~ 125 °C)
- internal battery – 3400mAh
- internal or external RF antenna
- waterproof case, 80 x 80 x 28 mm

Relay Specification:

- NO – normal open, (max. 30V AC or DC, 1A)
- Close (short circuit) triggered by alarm

Wiring of G7-DT-R



When temperature is higher or lower than user preset level:

1. Alarm Data will be sent to base station.
2. Relay will be triggered to ON (closed) for a programmable period.

(3) G7-H2-R Wireless Temperature & Humidity Sensor (with Relay)

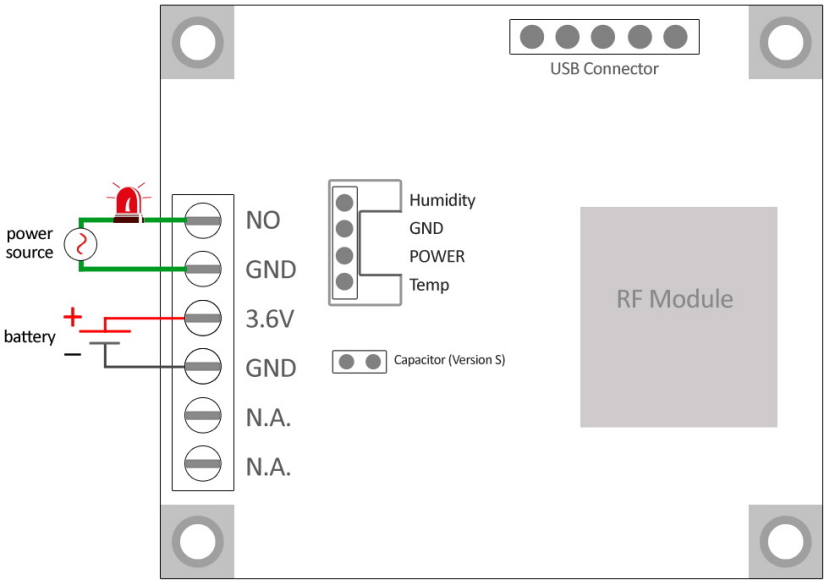
Probe Specification:

- wireless temperature sensor (-55 ~ 125 °C)
- wireless humidity sensor (0-100%RH)
- internal battery – 3400mAh
- internal or external RF antenna
- waterproof case, 80 x 80 x 28 mm

Relay Specification:

- NO – normal open, (max. 30V AC or DC, 1A)
- Close (short circuit) triggered by alarm

Wiring of G7-H2-R



When temperature or humidity is higher or lower than user preset level:

1. Alarm Data will be sent to base station.
2. Relay will be triggered to “Closed” for a programmable period.

(4) G7-D2-R Wireless Digital Alarm (with Relay)

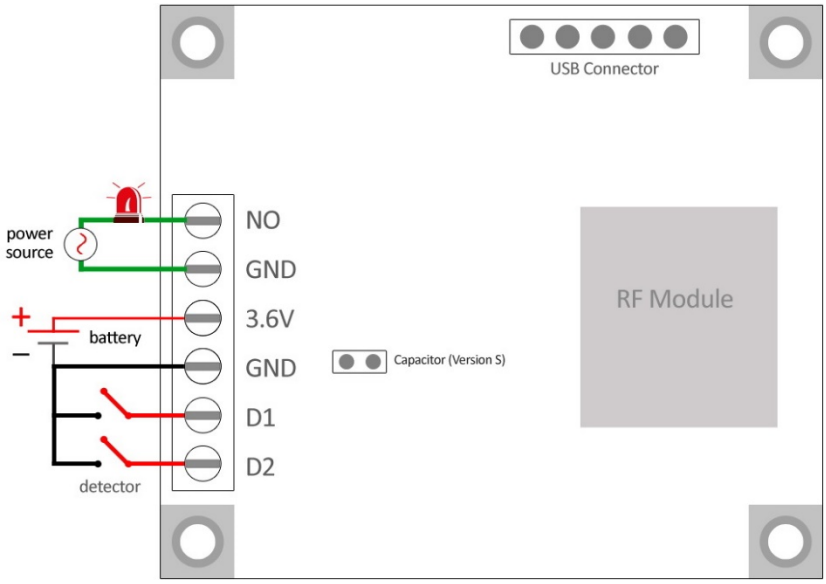
Probe Specification:

- 2 x dry contact alarm inputs, NO- normal open
- alarm is triggered by smoke detector, water leakage detector, etc.
- internal battery – 3400mAh
- internal or external RF antenna
- waterproof case, 80 x 80 x 28 mm

Relay Specification:

- NO – normal open, (max. 30V AC or DC, 1A)
- Close (short circuit) triggered by alarm

Wiring of G7-D2-R



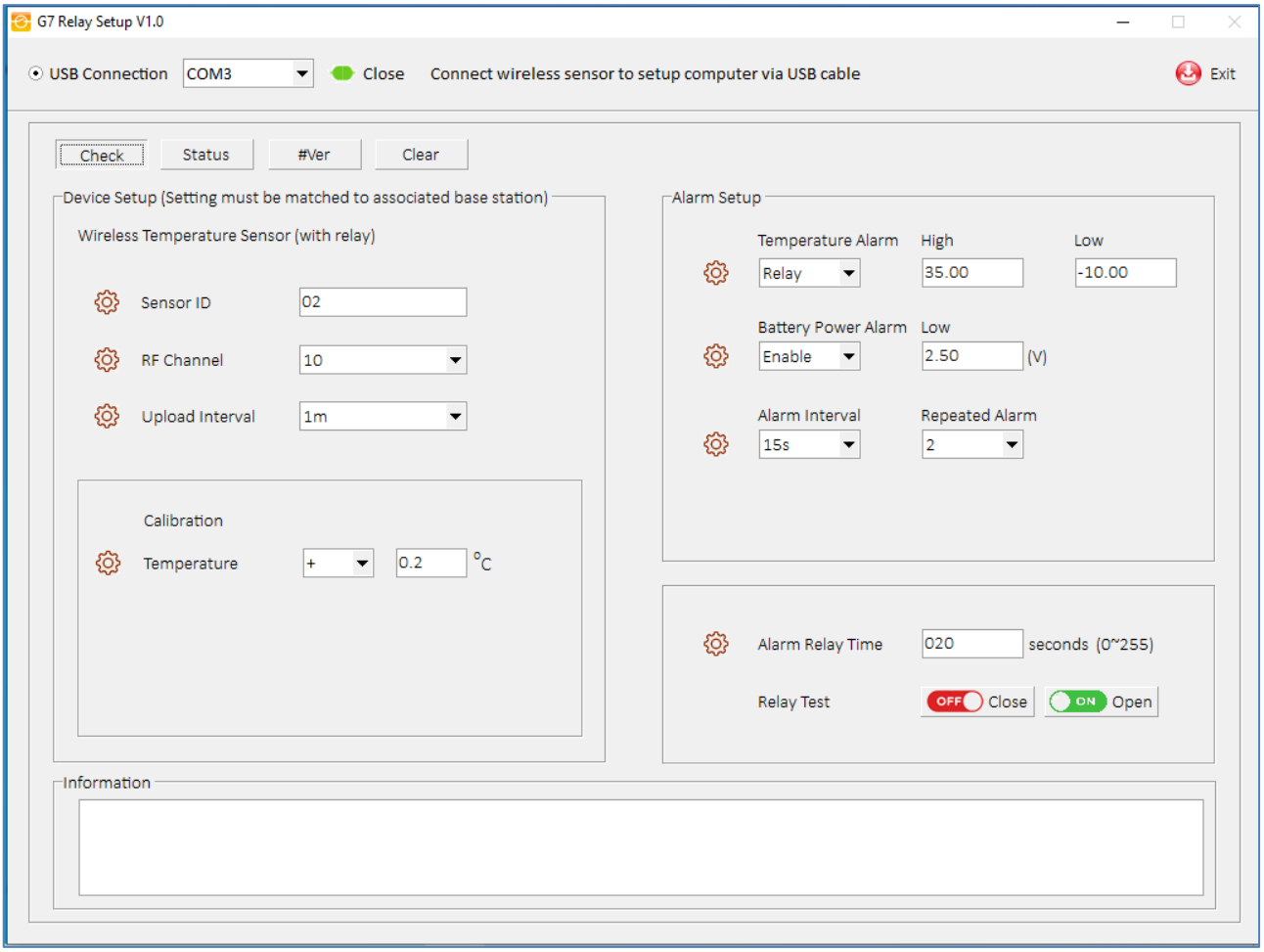
When digital alarm is triggered by external detector:

3. Alarm will be sent to base station.
4. Relay will be triggered to ON (closed) for a programmable period.

(5) Application Example

- Local Siren is turned on when the temperature is higher or lower than preset level.
- Other equipment (e.g. fan or freezer) can be turned on in other applications.

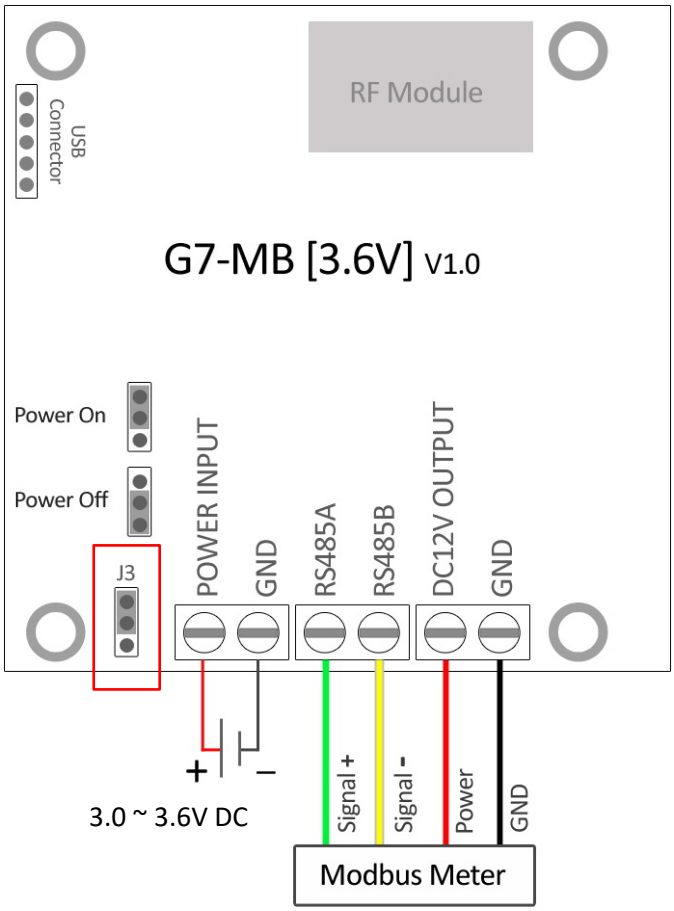
- G7 Sensor Setup Screenshot



19. Modbus Sensor

(1) G7-MS Wireless Modbus Sensor

- support two floating point data registers of Modbus sensor or meter
- standard Modbus protocol via RS485 port
- provides 12V internal power



POW: external power source 2.5~3.6VDC

GND: ground for power source

RS485A: Signal +

RS485B: Signal -

Output: 12V DC output for Modbus Meter

GND: Output Power Ground

DC 12V Output:

- power output when data is read from Modbus meter
- maximum rating is 40mA
- rating > 40mA, external power source must be used

(2) Application Example

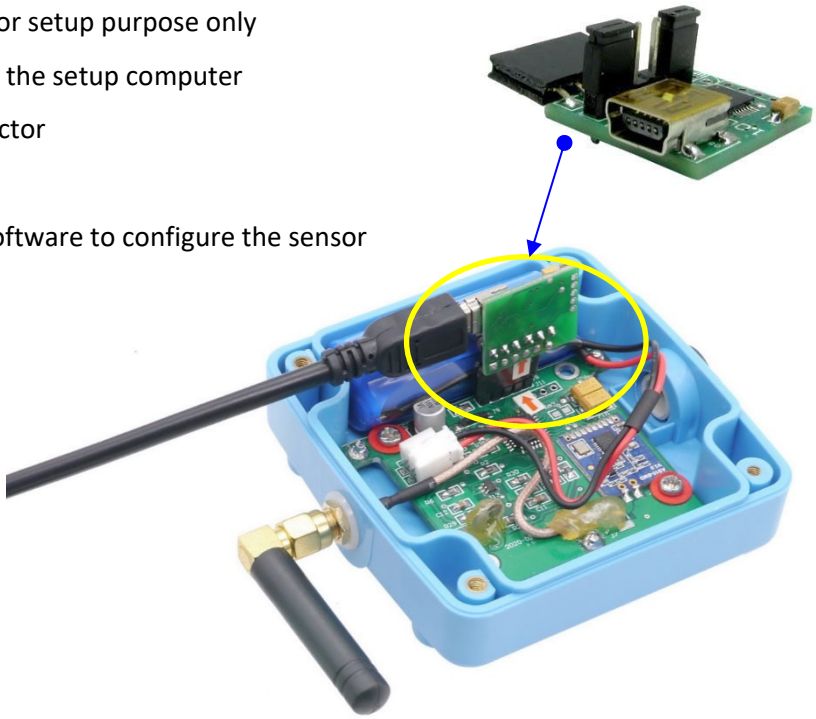
- Modbus Flowmeter
- 2 x floating point data registers holding instant flow and total flow readings

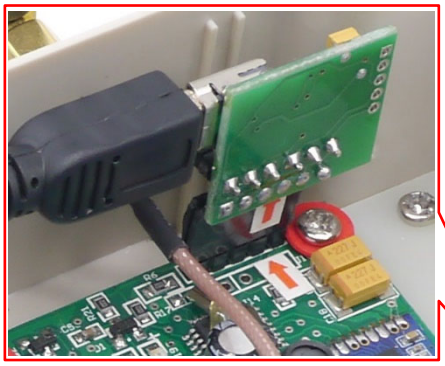
- Modbus Soil Temperature & Moisture Sensor
- 2 x floating point data registers holding temperature and moisture readings

20. Configure Wireless Sensor with Relay - USB Connection

(1) Power and USB Connection

- Plug in the USB adaptor for setup purpose only
- Connect the USB cable to the setup computer
- Plug in the battery connector
- Install USB Driver
- Run "G7 Sensor Setup" software to configure the sensor



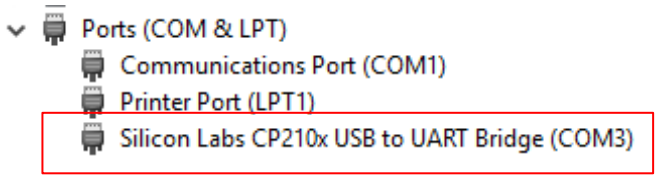


Extended Battery Model

(2) USB Adaptor

1. Install the USB Driver
   Run USB driver in folder \USB_Driver\
   - CP210xVCPInstaller_x64 for 64bit Windows
   - CP210xVCPInstaller_x86 for 32bit Windows

2. Insert the USB adaptor onto the sensor board
3. Connect with USB cable, and switch on battery power
4. Check the COM Port in Device Manager



5. Select the same COM port in Setup Software

(3) Sensor Board LED

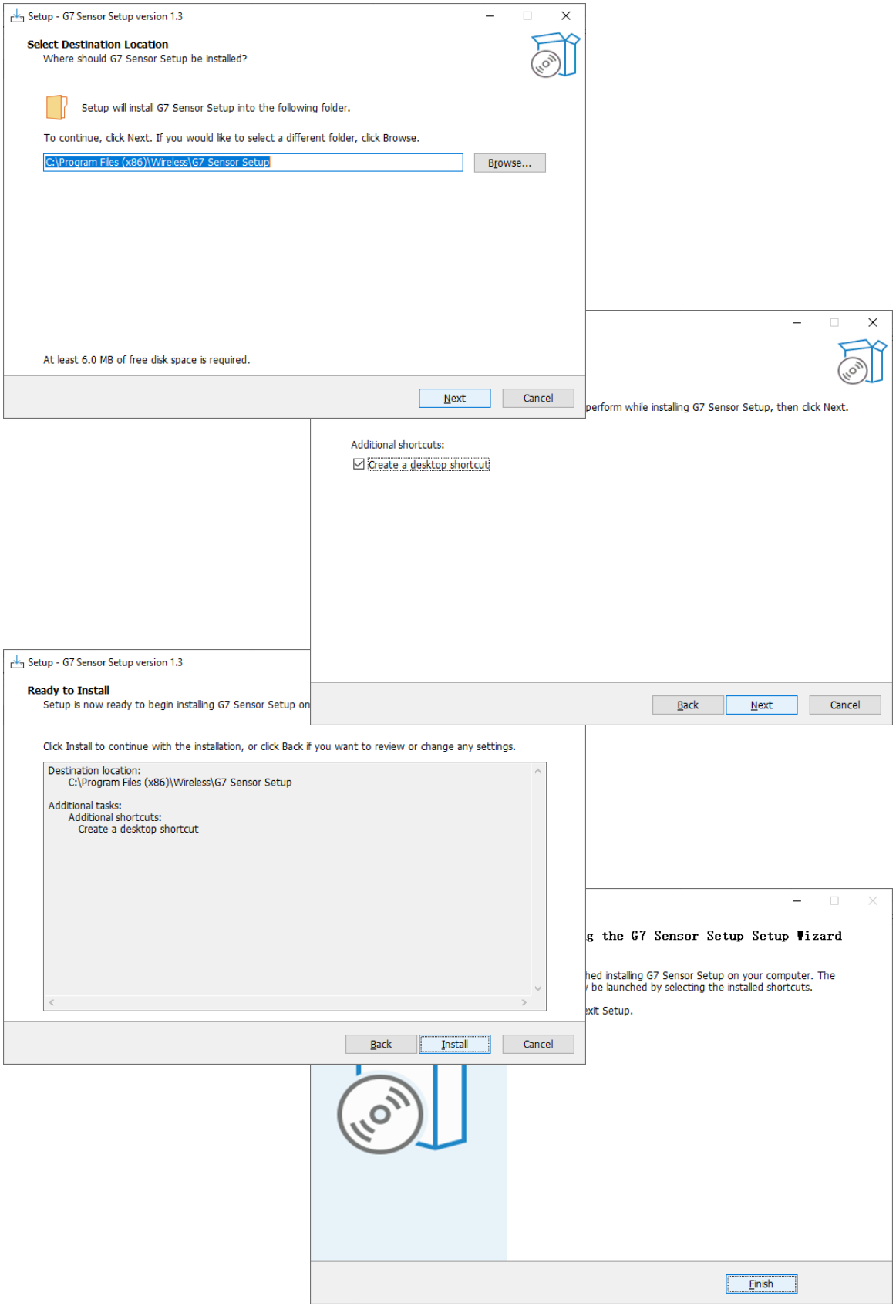
Each board has a status LED

- Right after battery is connected, it is ON for few seconds then OFF.
- Standby: LED is off
- Data Upload: LED flash
- When the battery is low in power or voltage, LED keeps ON or flashing.
- When USB adaptor is wrongly aligned and inserted, it is ON for few seconds then OFF.

21. Setup Wireless Sensor with Relay

1. G7 Sensor (with relay) Setup Software Installation

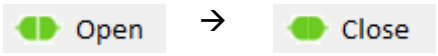
Run "G7 Sensor Setup"



2. Select COM Port

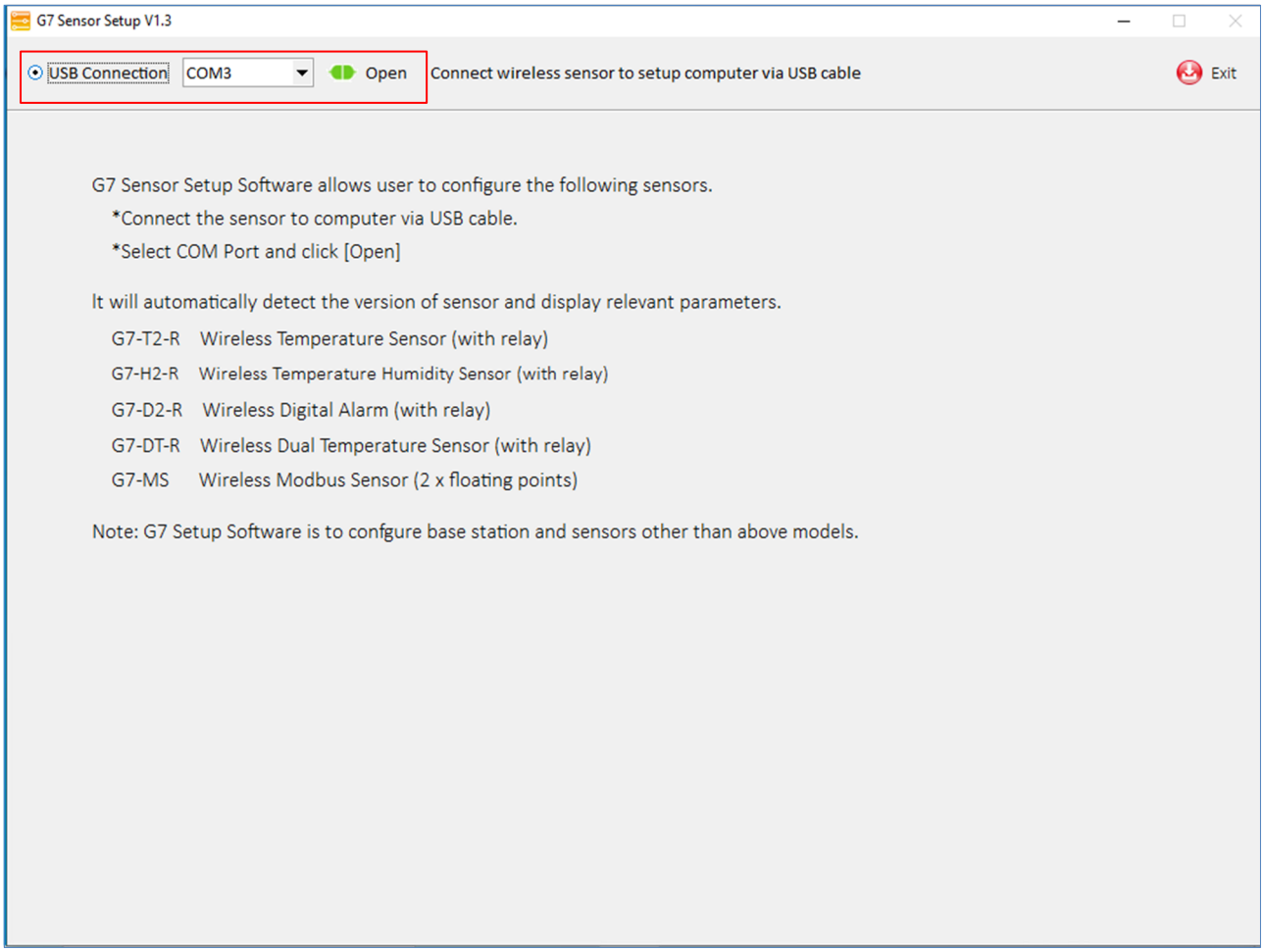
(1) Select the COM port provided in USB driver installation.

(2) Click [Open] to establish connection between setup computer and sensor board.



(3) Enter the Base Station RF Channel and Upload Interval.

These parameters MUST be the same as the assigned base station.



3. Temperature Sensor with Relay [G7-T2-R]

(1) Sensor ID must be unique

(2) RF Channel and upload interval must be the same to base station.

(3) Calibration is only necessary when the reading is different to the actual measurement.

(4) Alarm Setup Enable: Alarm is sent to base station, but relay is not triggered.

Relay: Alarm is sent to base station, and relay is closed.

(5) Alarm Interval: user will be alerted repeatedly within this period

Repeated Alarm: number of repeated alarms within alarm interval

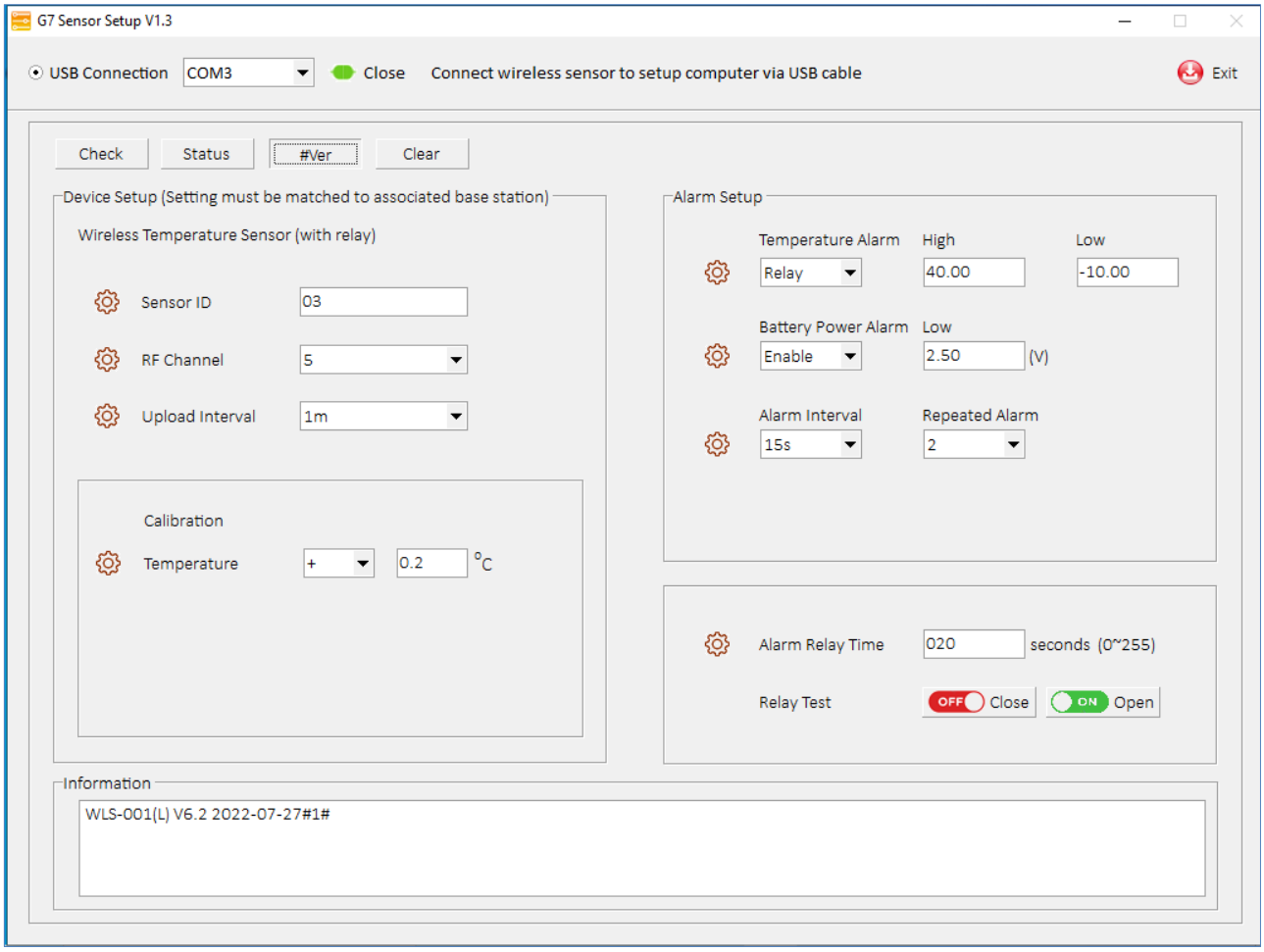
(6) Alarm Relay Time is the period of relay being turned on after alarm is triggered.

Relay will be turned off automatically after the alarm relay time.

Alarm Relay Time = 0, relay will be turned off only when alarm is off.

(7) Relay Test is to turn on/off (close/open) the relay manually for testing.

(8) Click “Check” button to verify the setting.



4. Dual Temperature Sensor with Relay [G7-DT-R]

(1) Sensor ID must be unique

(2) RF Channel and upload interval must be the same to base station.

(3) Calibration is only necessary when the reading is different to the actual measurement.

(4) Alarm Setup Enable: Alarm is sent to base station, but relay is not triggered.

Relay: Alarm is sent to base station, and relay is closed.

(5) Alarm Interval: user will be alerted repeatedly within this period

Repeated Alarm: number of repeated alarms within alarm interval

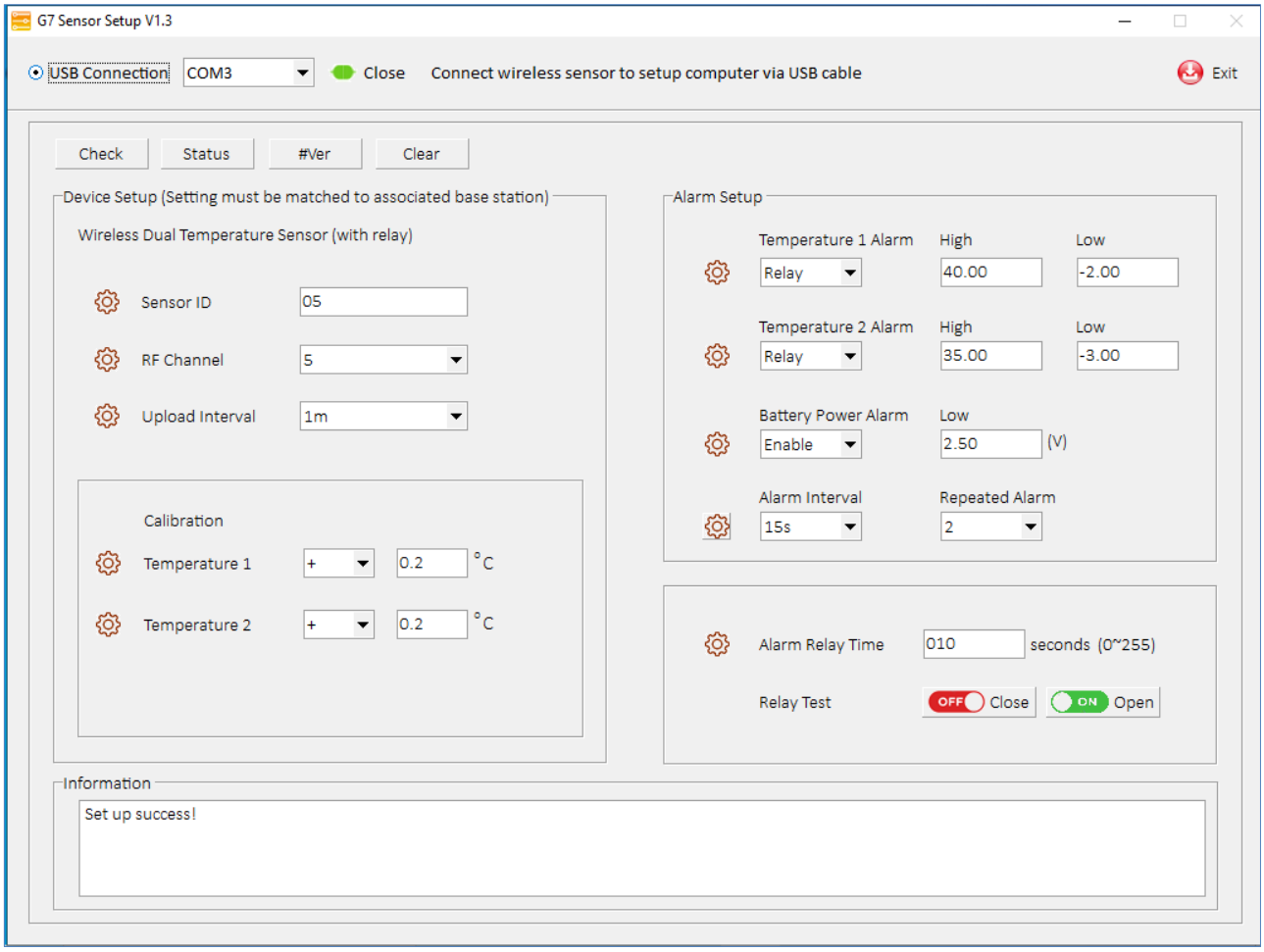
(6) Alarm Relay Time is the period of relay being turned on after alarm is triggered.

Relay will be turned off automatically after the alarm relay time.

Alarm Relay Time = 0, relay will be turned off only when alarm is off.

(7) Relay Test is to turn on/off (close/open) the relay manually for testing.

(8) Click “Check” button to verify the setting.



5. Temperature Humidity Sensor with Relay [G7-H2-R or G7-H3-R]

(1) Sensor ID must be unique

(2) RF Channel and upload interval must be the same to base station.

(3) Calibration is only necessary when the reading is different to the actual measurement.

(4) Alarm Setup Enable: Alarm is sent to base station, but relay is not triggered.

Relay: Alarm is sent to base station, and relay is closed.

(5) Alarm Interval: user will be alerted repeatedly within this period

Repeated Alarm: number of repeated alarms within alarm interval

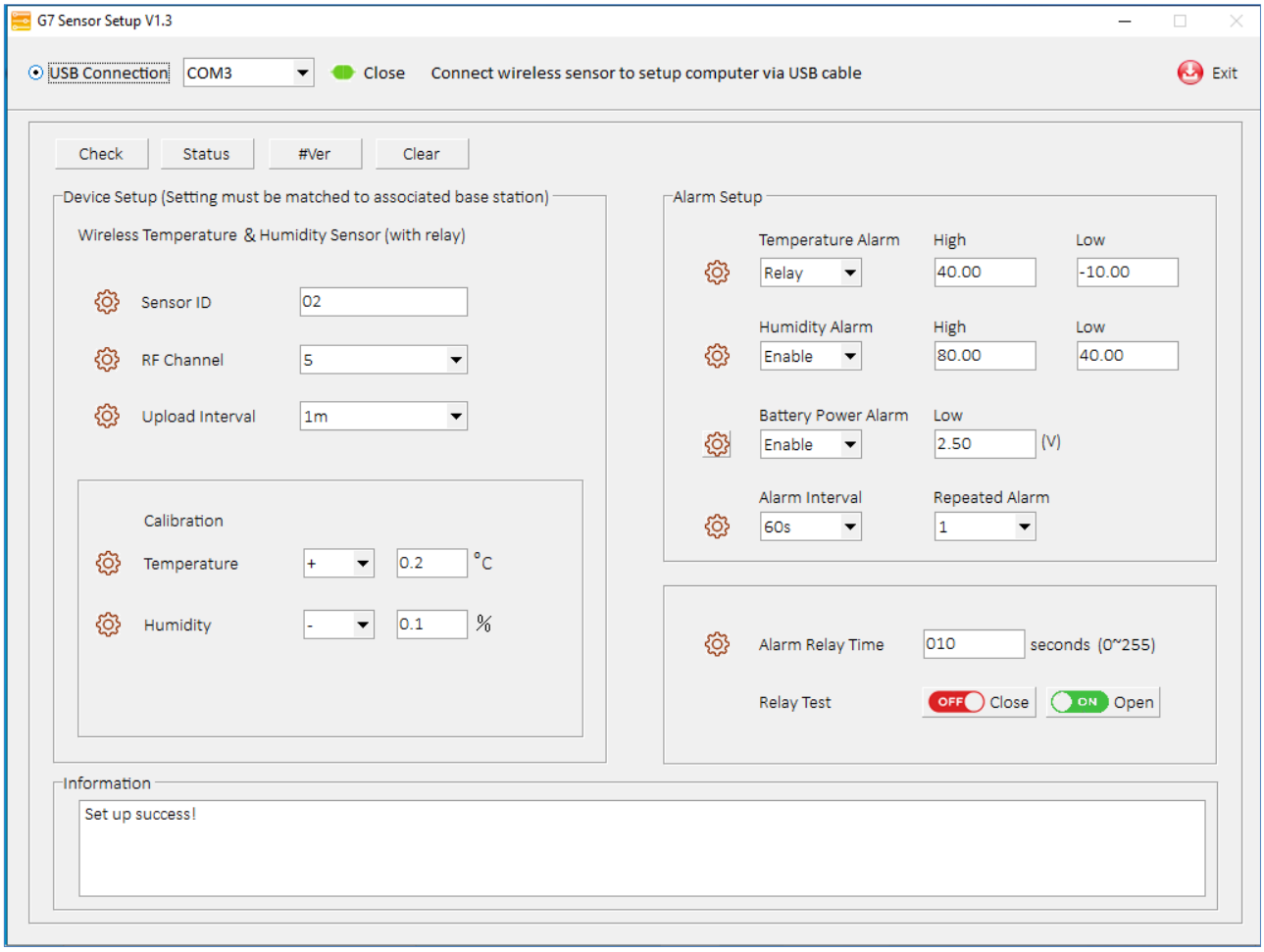
(6) Alarm Relay Time is the period of relay being turned on after alarm is triggered.

Relay will be turned off automatically after the alarm relay time.

Alarm Relay Time = 0, relay will be turned off only when alarm is off.

(7) Relay Test is to turn on/off (close/open) the relay manually for testing.

(8) Click “Check” button to verify the setting.



6. Digital Alarm with Relay [G7-D2-R]

(1) Sensor ID must be unique

(2) RF Channel and upload interval must be the same to base station.

(3) No Calibration is necessary.

(4) Alarm Setup Enable: Alarm is sent to base station, but relay is not triggered.

Relay: Alarm is sent to base station, and relay is closed.

(5) Alarm Interval: user will be alerted repeatedly within this period

Repeated Alarm: number of repeated alarms within alarm interval

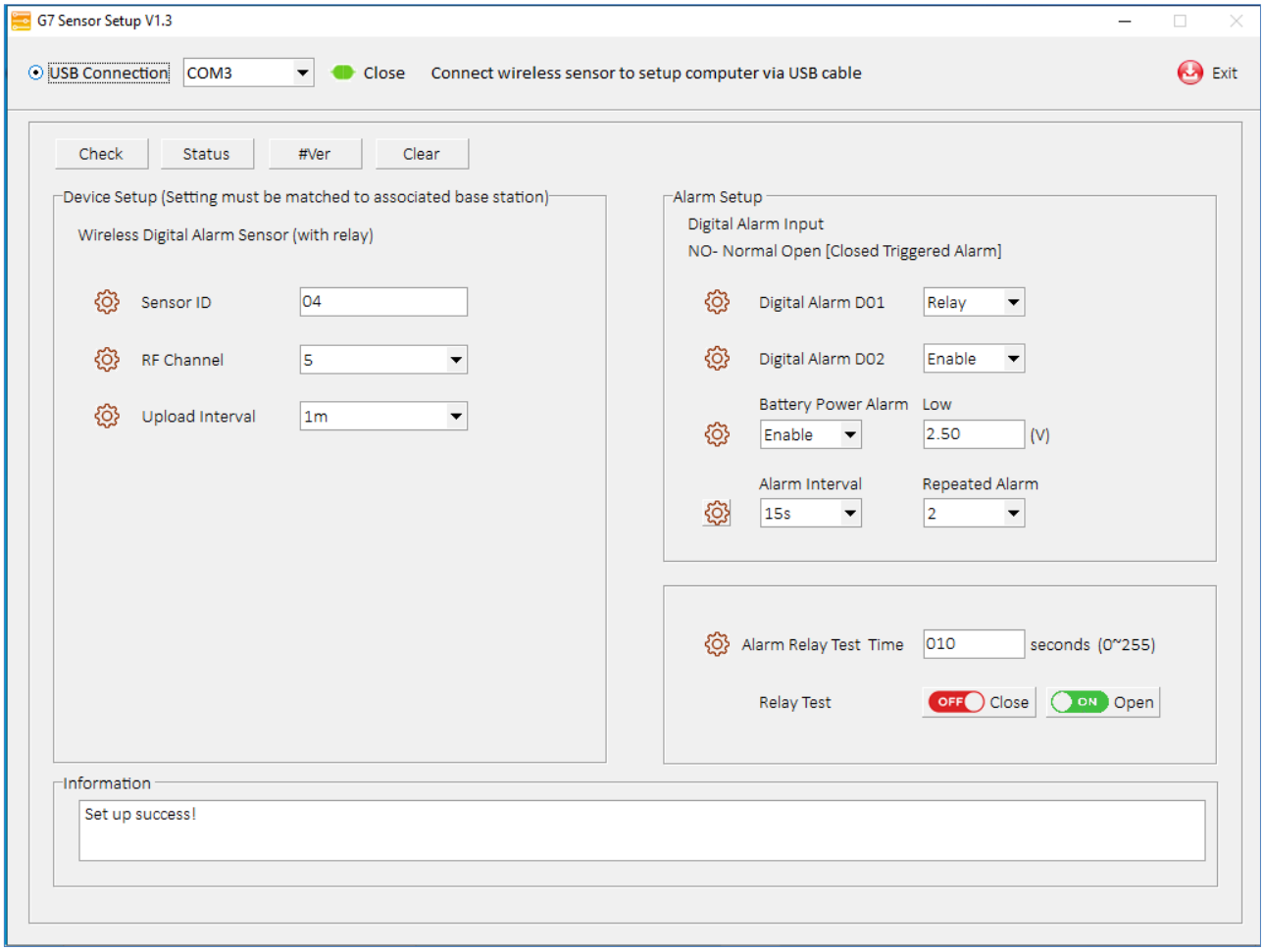
(6) Alarm Relay Time is the period of relay being turned on after alarm is triggered.

Relay will be turned off automatically after the alarm relay time.

Alarm Relay Time = 0, relay will be turned off only when alarm is off.

(7) Relay Test is to turn on/off (close/open) the relay manually for testing.

(8) Click “Check” button to verify the setting.



7. Modbus Sensor [G7-MS]

(1) Sensor ID

Sensor ID must be unique when connecting to the same base station

(2) Warm Up Time

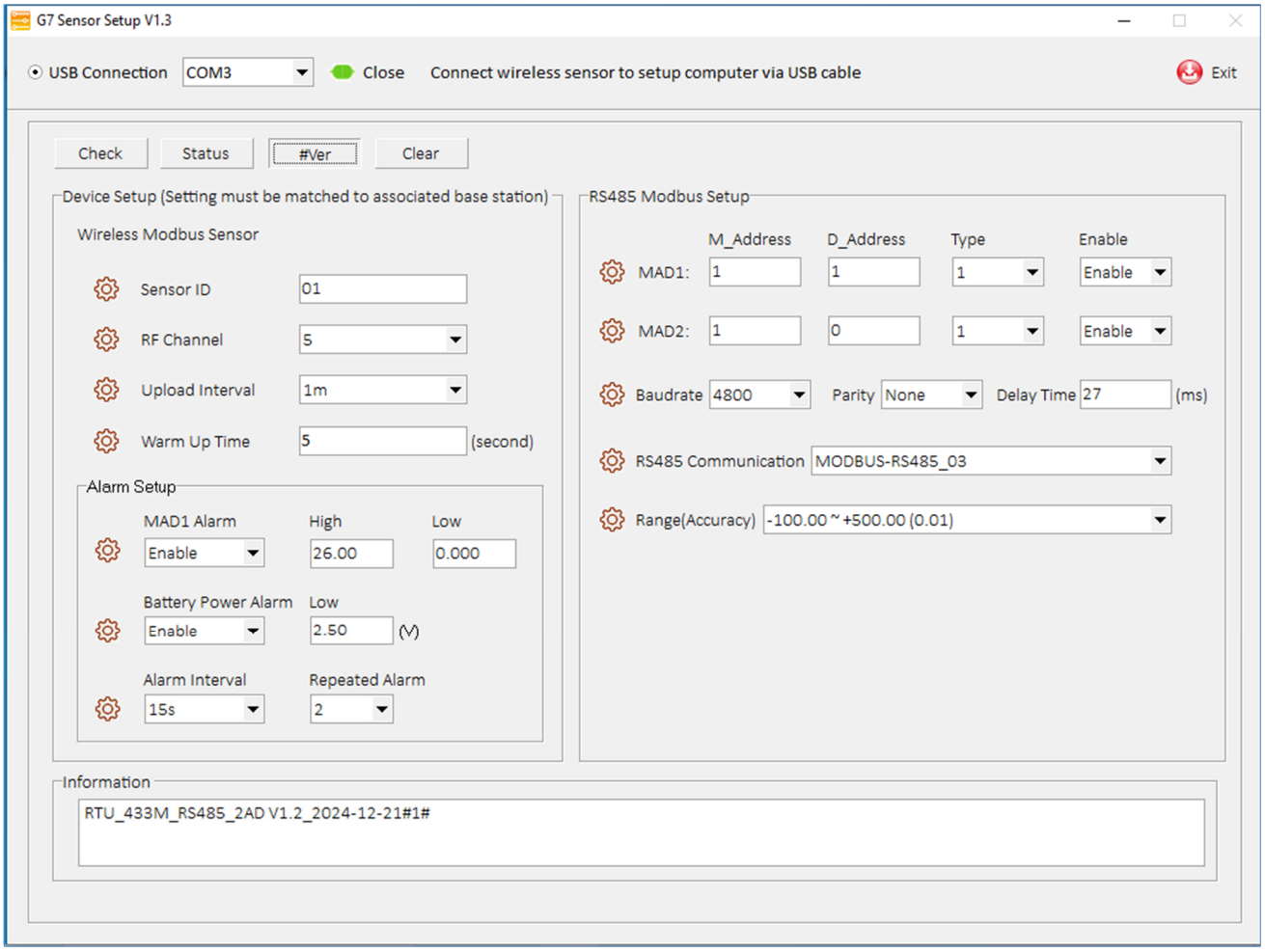
Duration of power output to the sensor/meter before data logging

(3) Data Registers Setup

2 floating point data registers

MAD1:	floating point	(alarm support)
MAD2:	floating point	(no alarm)
M_Address:	Modbus Meter Address	
D_Address:	Data Register Address	
Type:	Data Format	
RS485 Port:	baud rate, parity, delay time (must be matched to that of Modbus Meter)	
Read:	Modbus-RS485_03	Read Command X03
	Modbus-RS485_04	Read Command X04

(4) RF Channel and upload interval should be same as base station



(5) MAD1 and MAD2 Data Type

0	Two Bytes Original Value				
1	Two Bytes Original Value/10				
2	Two Bytes Original Value/100				
3	Two Bytes Original Value/1000				
4	Floating Point	FFH4	FFH3	FFH2	FFH1
5	Floating Point	FFH2	FFH1	FFH4	FFH3
6	Floating Point	FFH1	FFH2	FFH3	FFH4
7	Long Word	FFH4	FFH3	FFH2	FFH1
8	Long Word/10	FFH4	FFH3	FFH2	FFH1
9	Long Word/100	FFH4	FFH3	FFH2	FFH1
10	Long Word/1000	FFH4	FFH3	FFH2	FFH1
11	Long Word/10	FFH2	FFH4	FFH3	FFH1
12	Long Word/100	FFH2	FFH4	FFH3	FFH1
13	Long Word/1000	FFH2	FFH4	FFH3	FFH1
14	Long Word/10 (+/-)	FFH4	FFH3	FFH2	FFH1

(6) RS485 port setting

RS485 Communication Delay Time depends on the Modbus sensor/meter.

Recommended: 1200bps > 100ms 2400pbs > 53ms 4800bps > 27ms
9600bps > 15ms 19600bps > 8ms

(7) Range and Accuracy

Range: -10.000 ~ +50.000 Accuracy: +/-0.001
Range: -100.00 ~ + 500.00 Accuracy: +/-0.01
Range: -1000.0 ~ + 50.000 Accuracy: +/-0.1

(8) Both MAD1 channel and Battery Level provide alarm setting

(9) Alarm Interval: duration between repeated alarms

Repeated: alarm will be stopped after the preset number of repeated alarms

8. Sensor Reading

(1) Click “Status” to get the reading instantly

(2) #STA:xx;A01:26.28;H01:57.63;B01:3.606;K01:03000110#

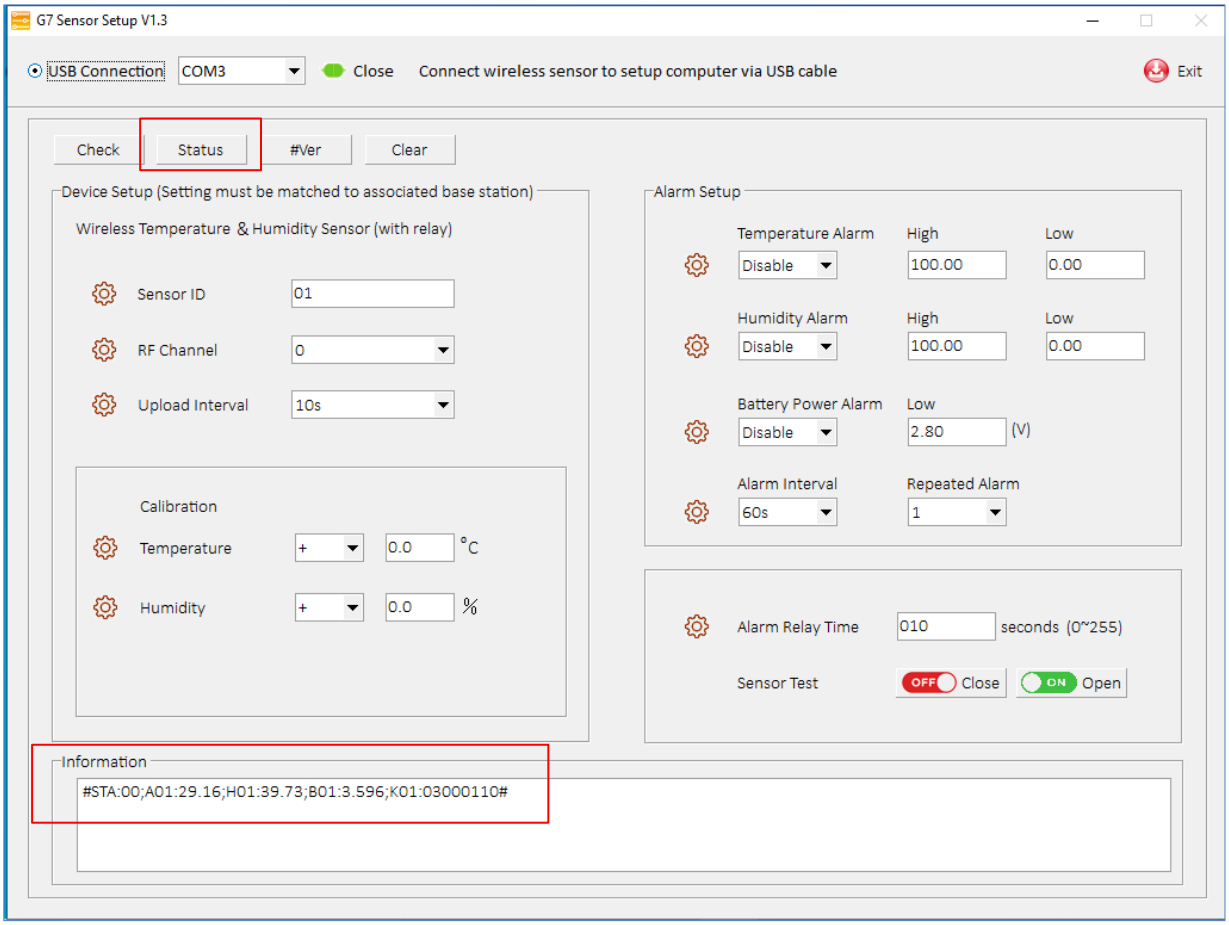
xx Sensor ID = xx + 1

Channel	G7-T2-R	G7-H2-R	G7-D2-R	G7-DT-R	G7-MS
A	Temperature	Temperature	D01: NO	Temperature	Floating Point
H	---	Humidity	D02: NO	Temperature	Floating Point

B01 Battery Voltage

K01 Sensor Status

1st digit:	sensor probe	0 - normal	1 - defect	
2nd digit:	alarm	0 - high alarm	1 - low alarm	3 - normal
3rd digit:	alarm status (channel A)	0 - normal	1 - alarm	
4th digit:	alarm status (channel H)	0 - normal	1 - alarm	
5th digit:	battery low voltage alarm	0 - normal	1 - alarm	
6th digit:	sensor type			
	0: temperature	1: temperature & humidity		
	2: AD01 (4-20mA)	3: AD02 (0-5V)	4: D01/D02	
	5: Modbus (G7-MB)	6: temperature & pressure		
	7: Dual Temperature	8: Modbus (G7-MS)		
7th digit:	power mode	0 - low power mode	1 - power mode	
8th digit:	RF module	0 - normal	1 - defect	



9. Complete System Configuration

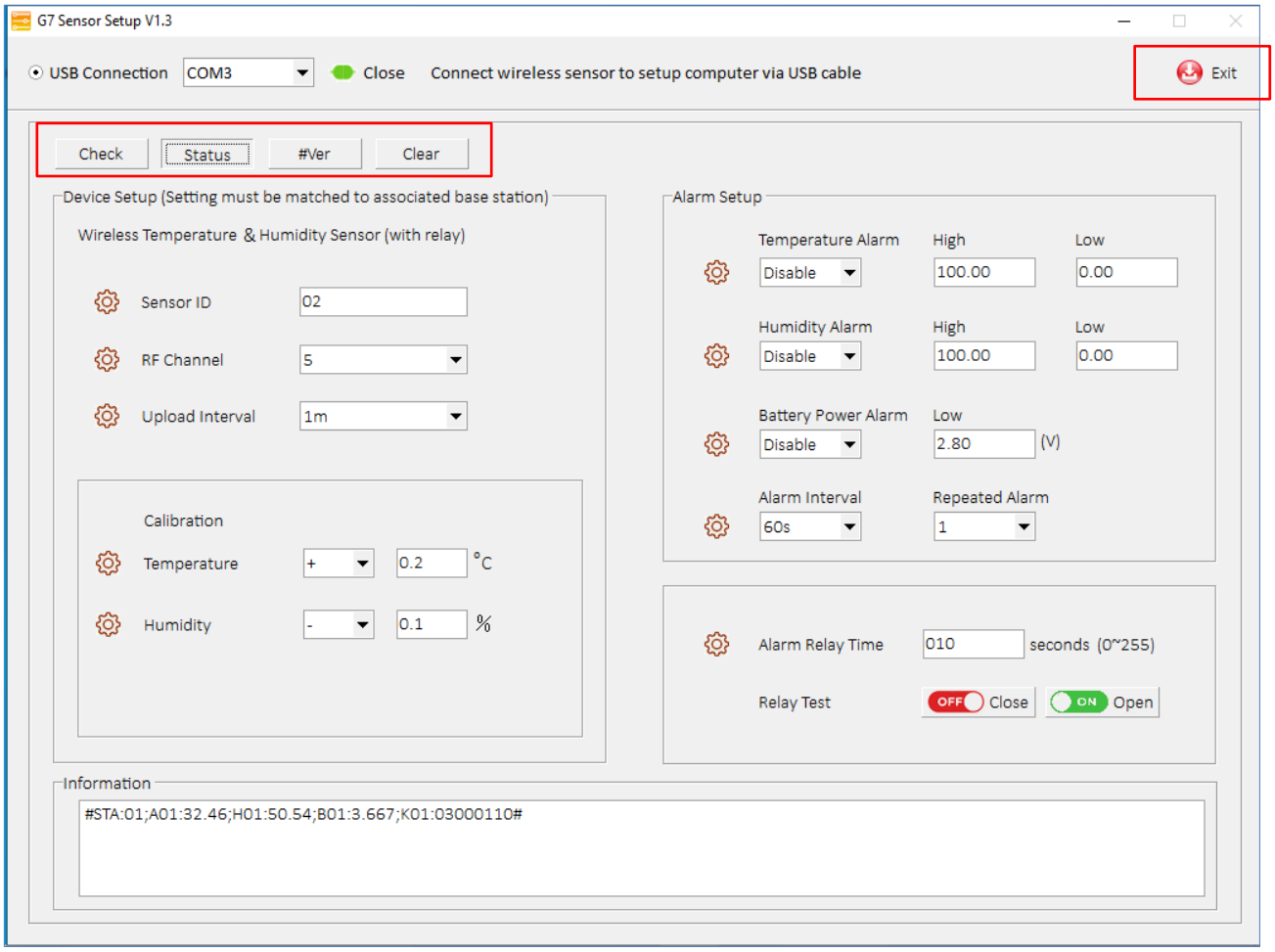
All wireless sensors must be configured one by one with different and unique Sensor ID.

Click [Exit] to save settings and close the setup software.

Disconnect battery and unplug USB adaptor after completing the setup.

ⓘ Disconnect battery before unplug USB adaptor.

Connect the battery again and leave the wireless sensor running.



Buttons features:

[Check] display all the parameters successfully configured in the sensor

[Status] display the live data

[#Ver] check the sensor hardware version

[Clear] clear the display of all settings

22. Safety and Regulatory Notice

All applicable regulatory compliance statements, product certification markings, and safety and electromagnetic compatibility (EMC) standards and regulations the Data Logger is compliant with.

European Union Declaration of Conformity

Statement

We, Easemind, declare under our sole responsibility that the product series G7 and G8 are in conformity with all applicable essential requirements necessary for CE marking, following the provisions of the European Council Directives EN300220, EN301489, EN60950.

The product is properly CE marked demonstrating this conformity and is for distribution within all member states of the EU with no restrictions.

This product follows the provisions of the European Directives EN300220, EN301489, EN60950.

This product was tested to conform to FCC rules and Regulations Part 15 Subpart B Class B.

Customer Support Links

View or download product support information from Easemind website:

http://www.easemind.net

Email contact at: email@easemind.net

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