

IntesisBox WiFi series for AC integration into Home Automation Systems

1. GENERAL OVERVIEW

INTESISBOX WIFI AIR CONDITIONING GATEWAYS WITH OPEN IP PROTOCOL

The new range of IntesisBox WiFi gateways allows an easy Air Conditioner integration in any kind of control and monitoring system using a simple IP Protocol.

New WiFi gateways family is specifically designed for Home Automation manufacturers or integrators interested in offering a control solution for the Air Conditioning system, allowing them to create a simple driver for their Home Hubs controllers.

1. GENERAL OVERVIEW

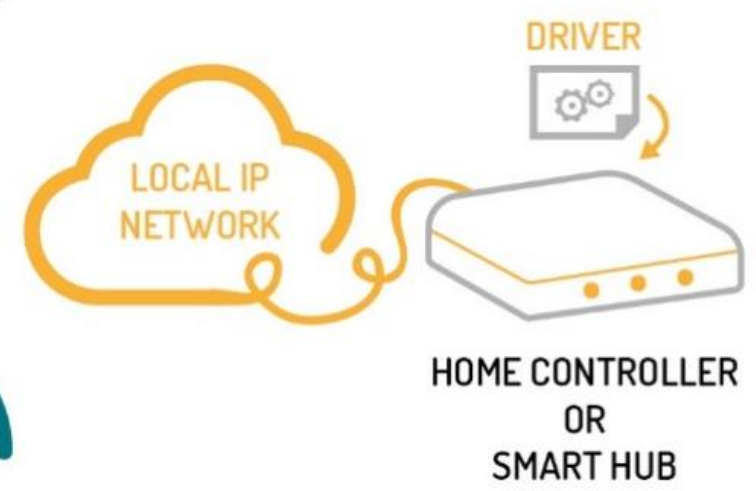
WIFI GATEWAYS TYPES

Universal WiFi device offers compatibility with thousands of models of Air Conditioners, it only requires an Indoor Unit that has an IR receiver working with a standard Wireless Remote Controller.

Specific WiFi devices use the proprietary communication protocol of each AC Manufacturer allowing real bidirectional communication with the AC system, offering also advanced parameters like error signals, error codes, power consumption, etc.



DIAGRAM EXAMPLE



INTEGRATE WITH...

-  Vera
 -  CRESTRON
 -  AMX
 -  FIBARO
 -  Control4
- And many more...

1. GENERAL OVERVIEW

ALL THE CONTROL YOU NEED

UNIVERSAL

SPECIFIC

ALL THE CONTROL YOU NEED	UNIVERSAL	SPECIFIC
On/Off	✓	✓
Mode	✓	✓
Set point	✓	✓
Room temperature	✓	✓
Fan speed	✓	✓
Vanes	✓	✓
Limitation of temperature	✓	✓
Signal error	✗	✓
Error code	✗	✓
Others	✗	✓

COMPATIBILITY



Airlin



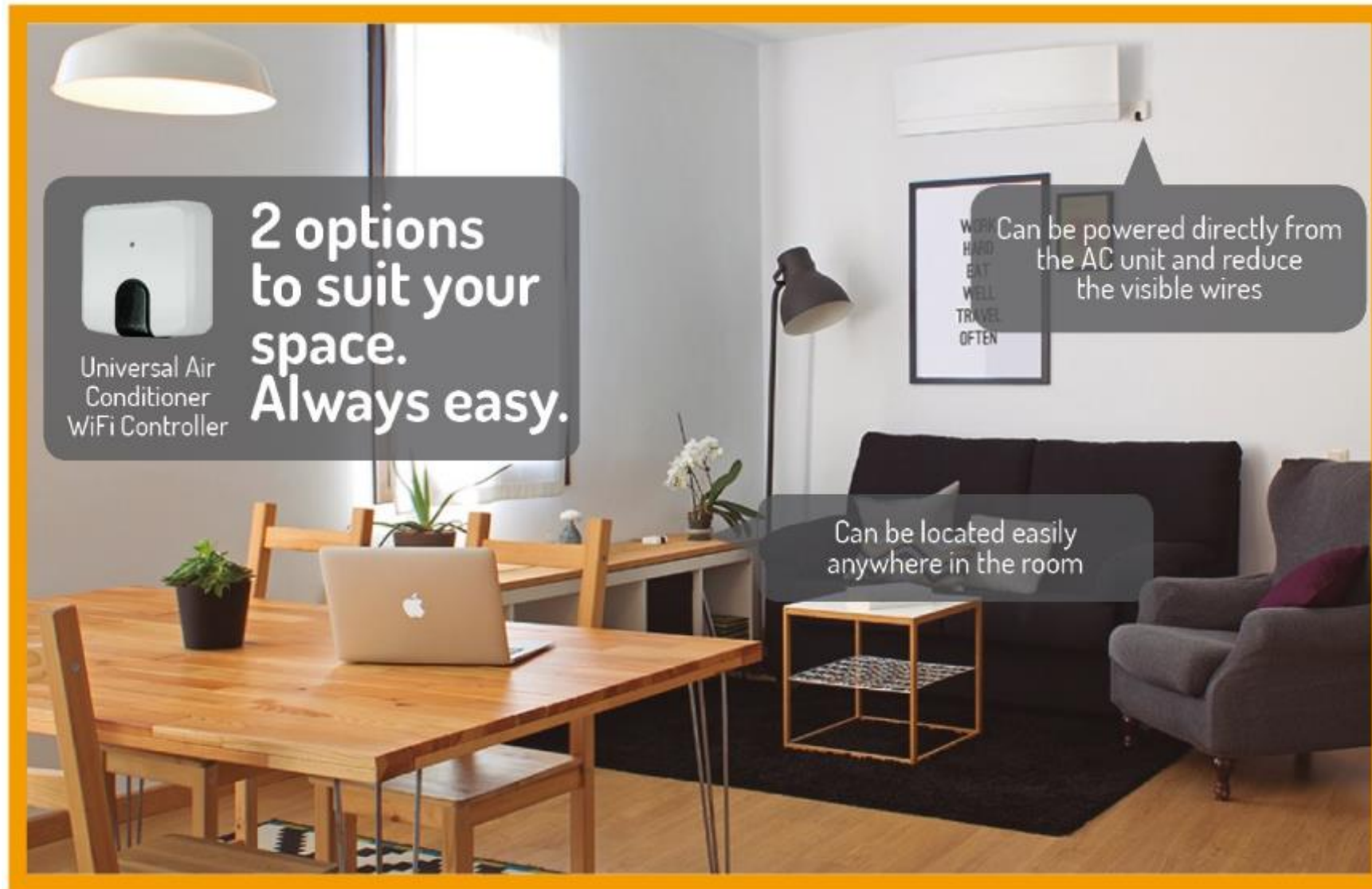
2. COMPATIBILITY

- **UNIVERSAL - IS-IR-WMP-1:** https://www.intesisbox.com/intesis/support/compatibilities/IntesisBox_IS-IR-xxx-1_AC_Compatibility.pdf?v=1480526256
- **MITSUBISHI ELECTRIC - ME-AC-WMP-1:** https://www.intesisbox.com/intesis/support/compatibilities/IntesisBox_ME-AC-xxx-1_AC_Compatibility.pdf?v=1487086947
- **DAIKIN - DK-AC-WMP-1 :** https://www.intesisbox.com/intesis/support/compatibilities/IntesisBox_DK-AC-xxx-1_AC_Compatibility.pdf?v=1488798637
- **DAIKIN - DK-RC-WMP-1 :** https://www.intesisbox.com/intesis/support/compatibilities/IntesisBox_DK-RC-xxx-1_AC_Compatibility.pdf?v=1487266419
- **TOSHIBA - TO-RC-WMP-1 :** https://www.intesisbox.com/intesis/support/compatibilities/IntesisBox_TO-RC-xxx-1_Compatibility.pdf?v=1487857392
- **MITSUBISHI HEAVY INDUSTRIES - MH-RC-WMP-1:** https://www.intesisbox.com/intesis/support/compatibilities/IntesisBox_MH-RC-xxx-1_AC_Compatibility.pdf?v=1486564944
- **PANASONIC - PA-AC-WMP-1:** https://www.intesisbox.com/intesis/support/compatibilities/IntesisBox_PA-AC-xxx-1_AC_Compatibility.pdf?v=1479986154
- **PANASONIC - PA-RC2-WMP-1:** https://www.intesisbox.com/intesis/support/compatibilities/IntesisBox_PA-RC2-xxx-1_Panasonic_Compatibility.pdf?v=1486565034
- **LG - LG-RC-WMP-1:** https://www.intesisbox.com/intesis/support/compatibilities/IntesisBox_LG-RC-xxx-1_AC_Compatibility.pdf?v=1488890318
- **FUJITSU - FJ-RC-WMP-1:** https://www.intesisbox.com/intesis/support/compatibilities/IntesisBox_FJ-RC-xxx-1_AC_Compatibility.pdf?v=1486724648

3. BENEFITS

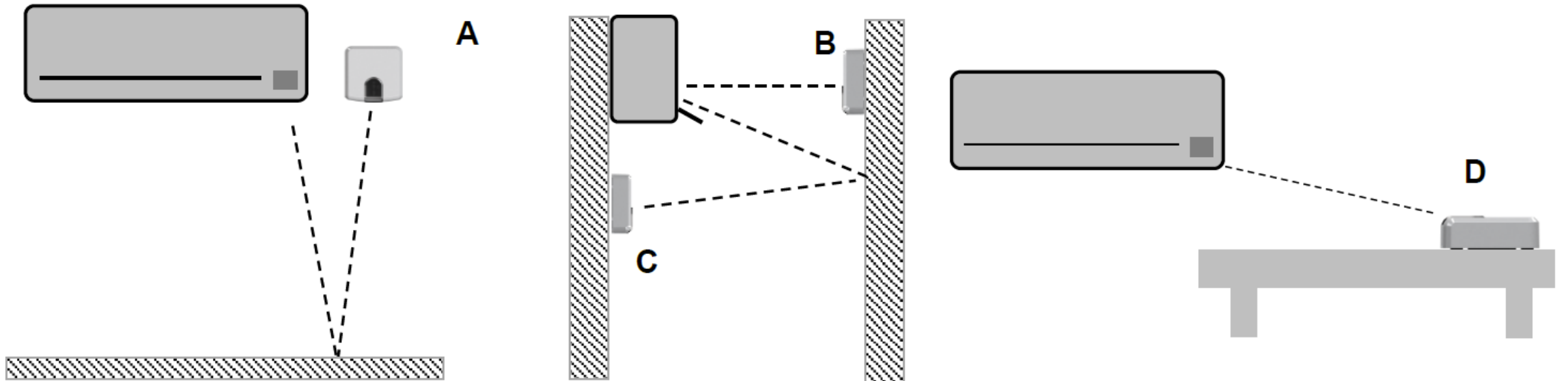
- The cable installation between the Air Conditioner & the Home Controller is not required.
- Thanks to the open IP protocol, easy integration with multi brand home controllers by creating new drivers.
- Full control through the Home Automation system which is the responsible of more than 50% of your electricity bill.
- Possibility to auto-discover the WiFi devices installed in the network.
- Firmware upgrades with new functionalities.
- WiFi configuration allows Dynamic or Static IPs.

4. INSTALLATION - UNIVERSAL

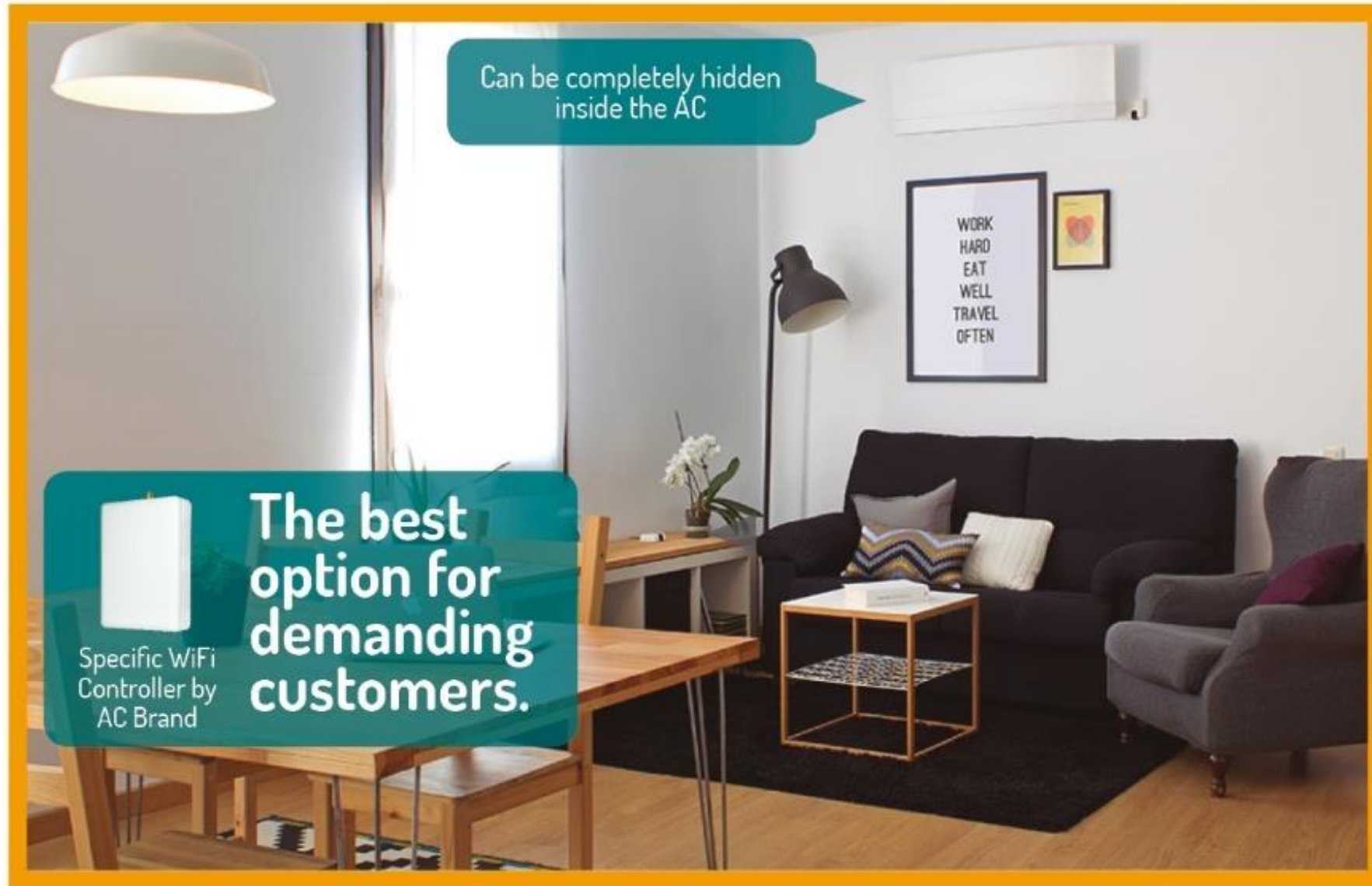


4. INSTALLATION - UNIVERSAL

Small dimensions and easy installation. It can be installed side-by-side with the AC unit (case A), in front of the AC unit (case B), under the AC unit (case C) or on a desktop position (case D).



4. INSTALLATION - SPECIFIC



4.1. MITSUBISHI ELECTRIC



DOMESTIC, COMERCIAL AND VRF

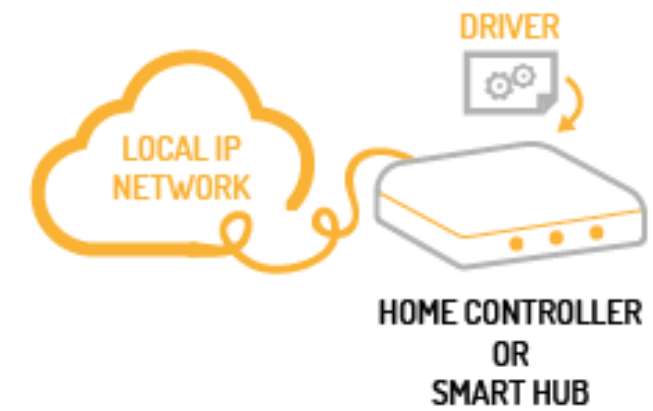


CN105

Direct connection in internal electronic card: **CN105**

Connection cable*

ME-AC-WMP-1

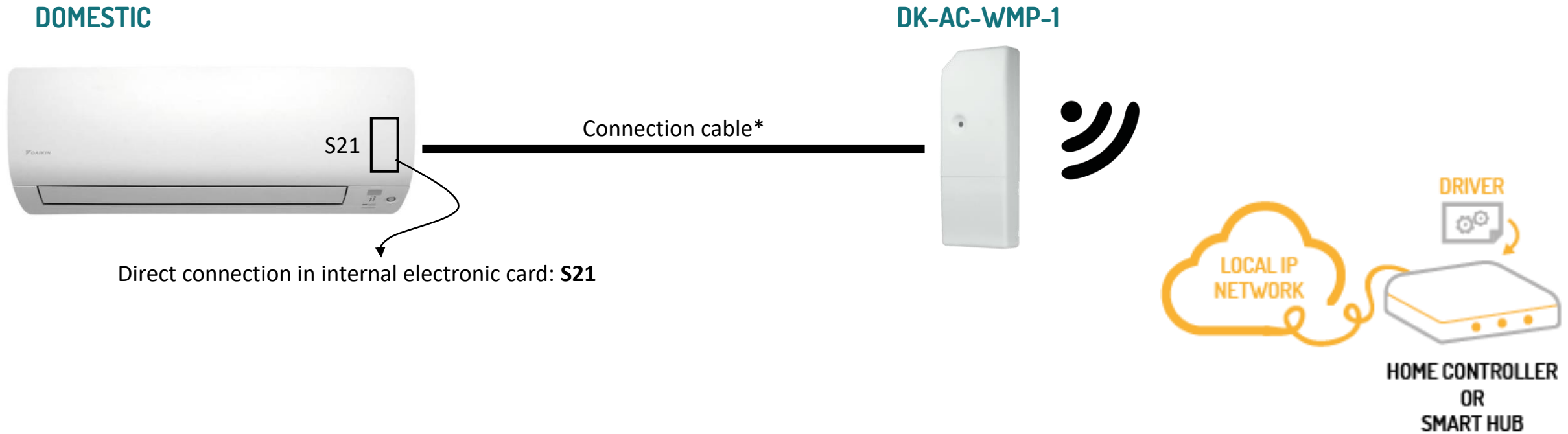


*The connection cable is supplied with the product

4.2. DAIKIN



DOMESTIC

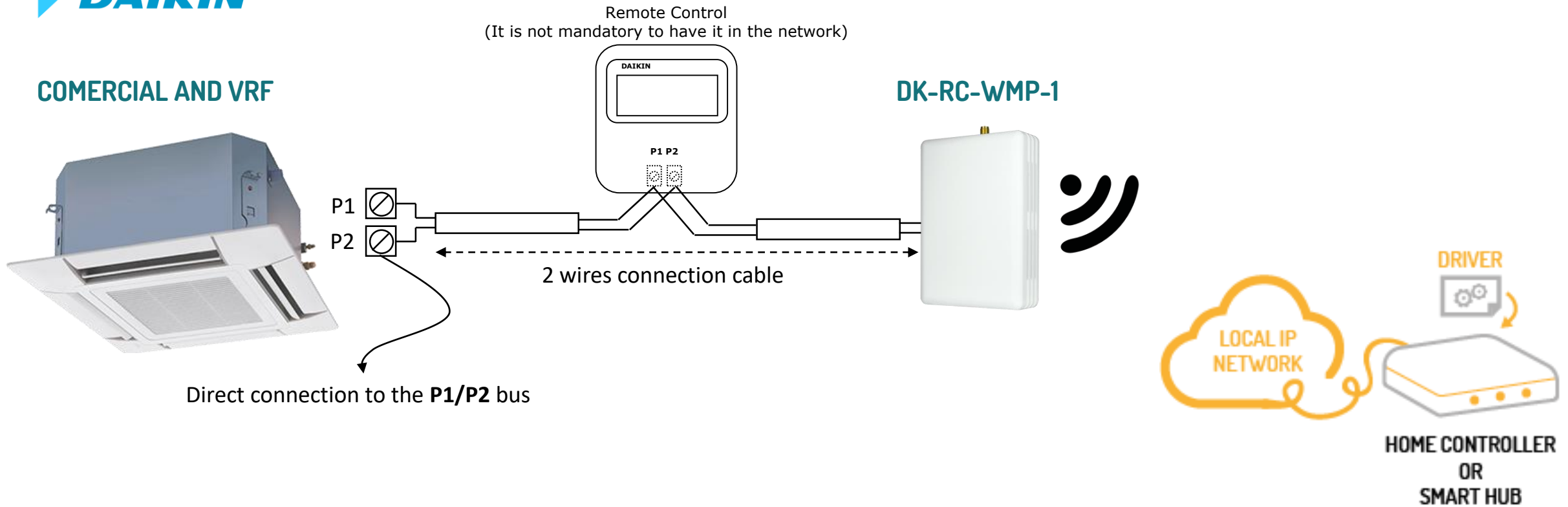


*The connection cable is supplied with the product

4.2. DAIKIN



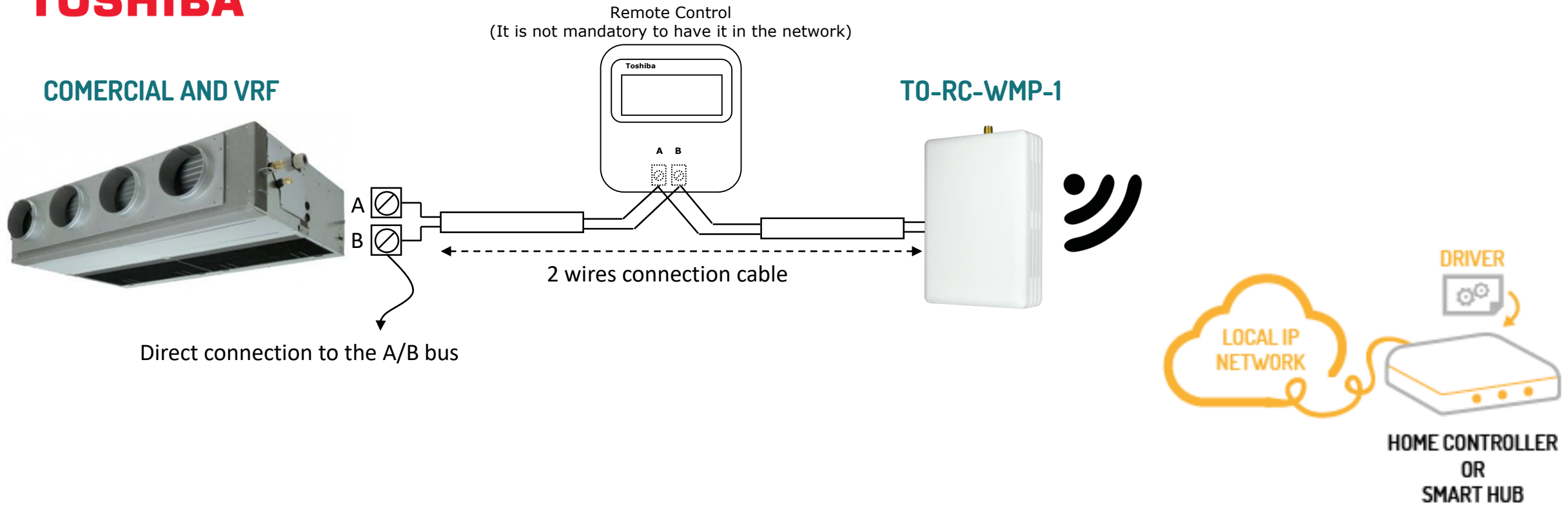
COMERCIAL AND VRF



4.3. TOSHIBA

TOSHIBA

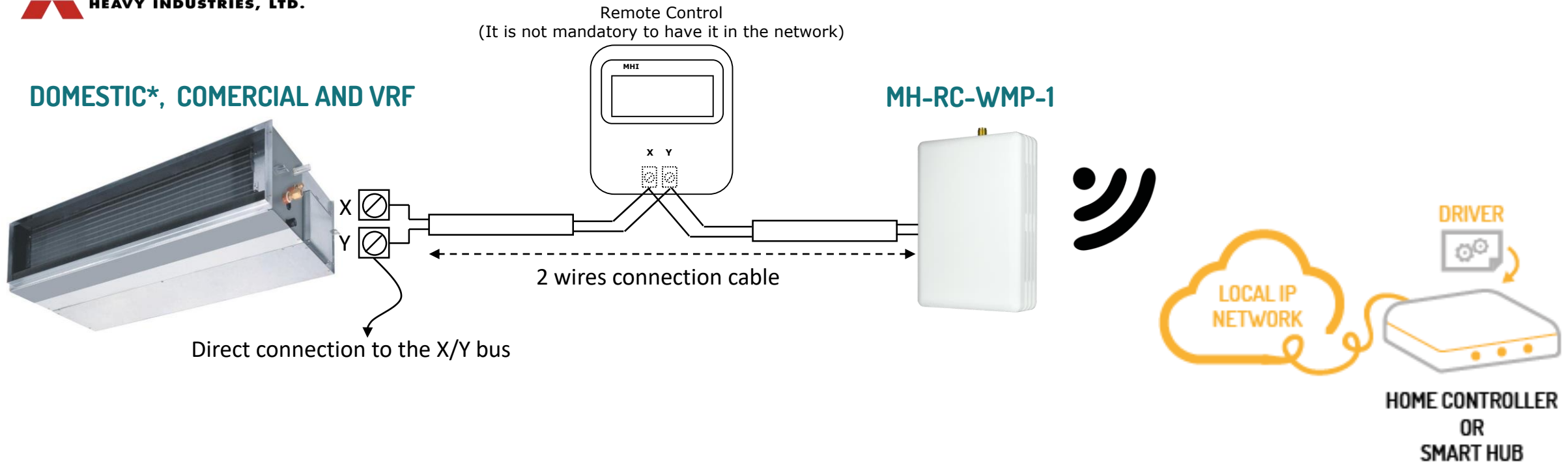
COMERCIAL AND VRF



4.4. MITSUBISHI HEAVY INDUSTRIES



DOMESTIC*, COMERCIAL AND VRF



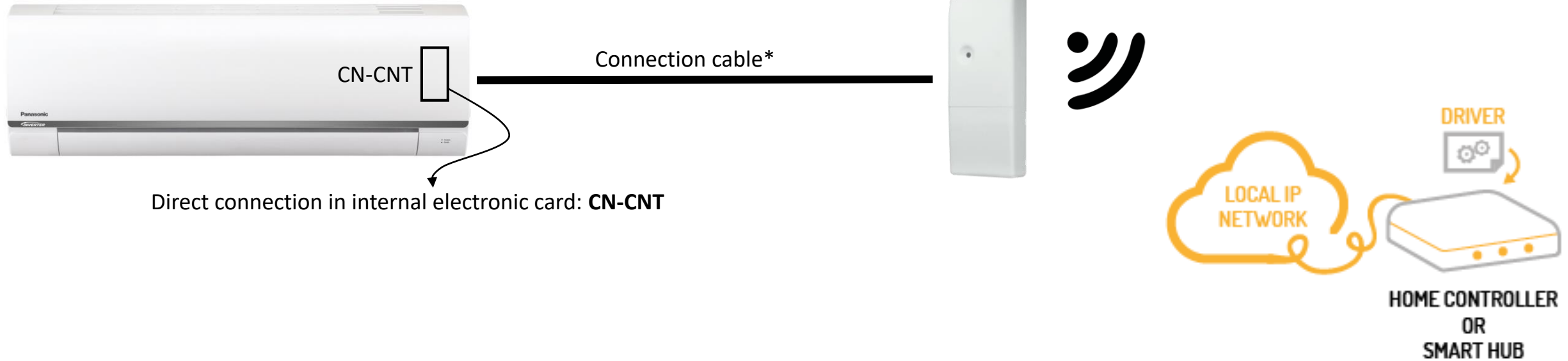
*For Domestic units optional SC-BIKN-E from MHI is required.

4.5. PANASONIC

Panasonic

DOMESTIC

PA-AC-WMP-1



*The connection cable is supplied with the product

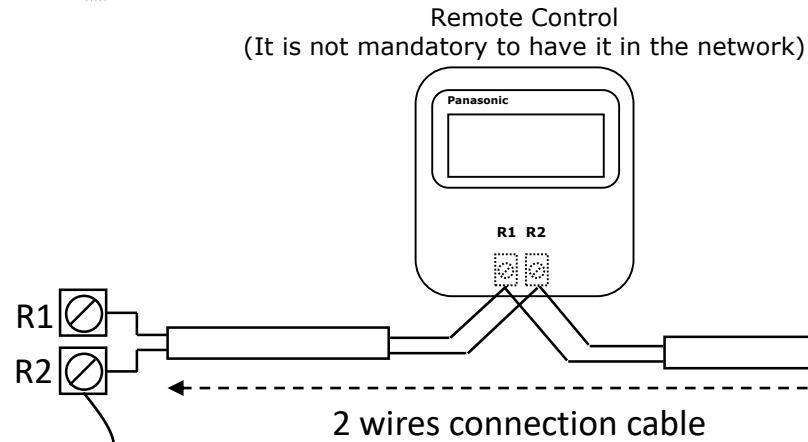
4.6. PANASONIC - SANYO

Panasonic **SANYO**

COMERCIAL AND VRF



Direct connection to the R1/R2 bus



PA-RC2-WMP-1



HOME CONTROLLER OR SMART HUB

4.7. LG



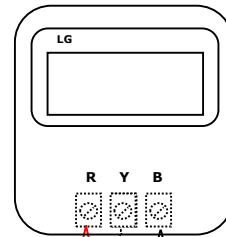
COMERCIAL AND VRF



B
Y
R

Direct connection to the RYB bus

Remote Control
(It is not mandatory to have it in the network)



LG-RC-WMP-1



HOME CONTROLLER
OR
SMART HUB

4.8. FUJITSU - GENERAL



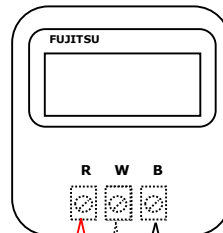
DOMESTIC*, COMERCIAL AND VRF



B
W
R

Direct connection to the BWR bus

Remote Control
(It is not mandatory to have it in the network)



FJ-RC-WMP-1

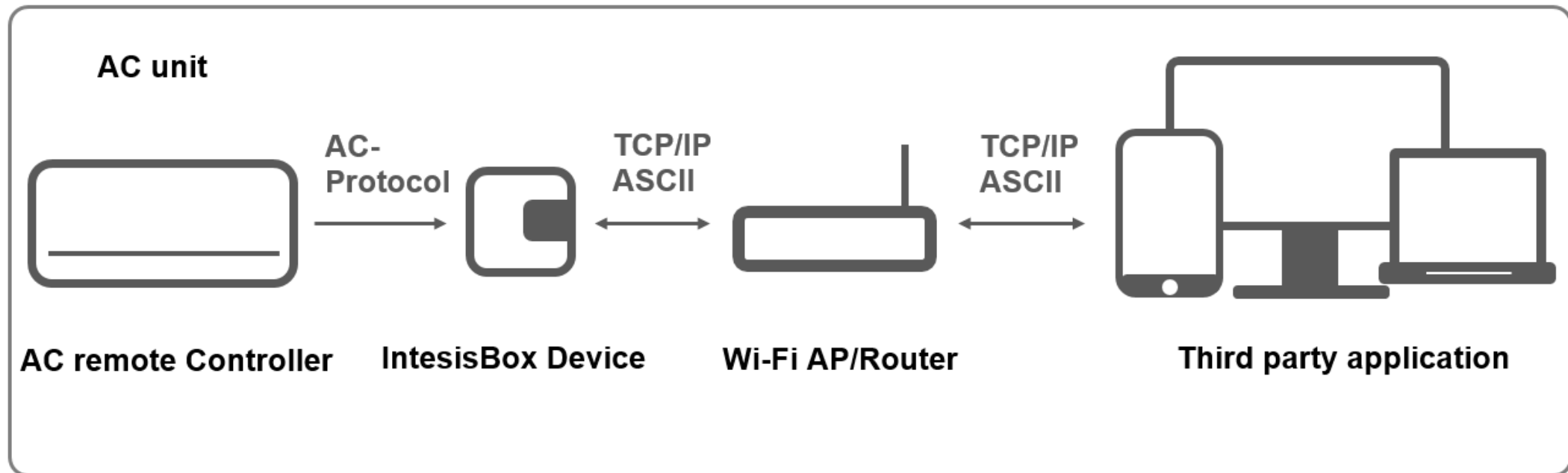


HOME CONTROLLER
OR
SMART HUB

*For domestic series, a communication kit is required.

5. IP CONNECTION

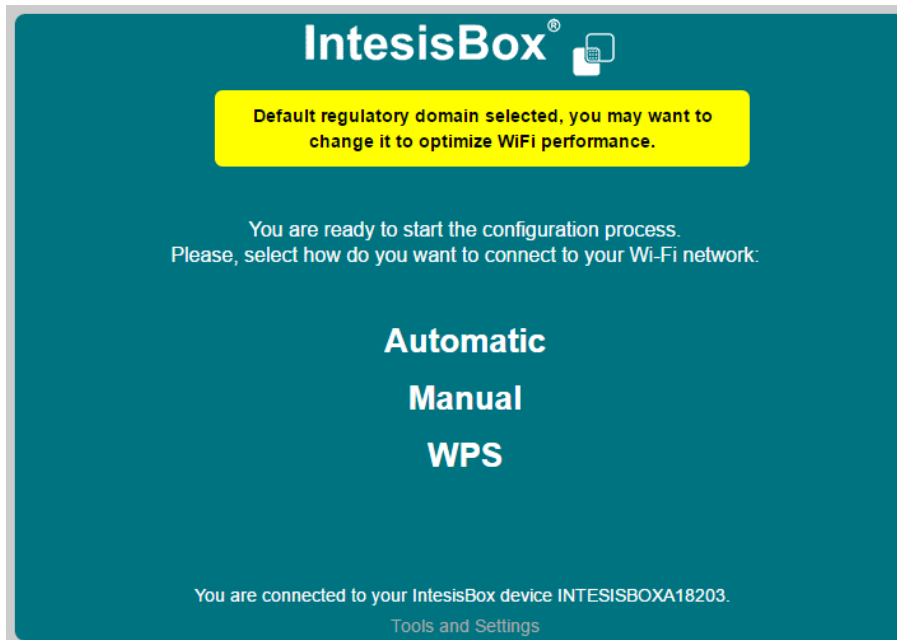
IntesisBox WMP devices establish a TCP connection between the device itself and the BMS, smart hub, home control or any other controller (from now on client) with IP connection enabled. Communication is done through ASCII telegrams.



6. WIFI NETWORK

The devices from factory are configured as access point. Once the product is powered on, the network should be visible in the WiFi box list with the SSID name **INTESISBOX-----** and the last 6 digits of the MAC address.

Connect your PC or mobile to this network and use the following web page to connect the WiFi device to the WiFi network: **wmpconfig.com**



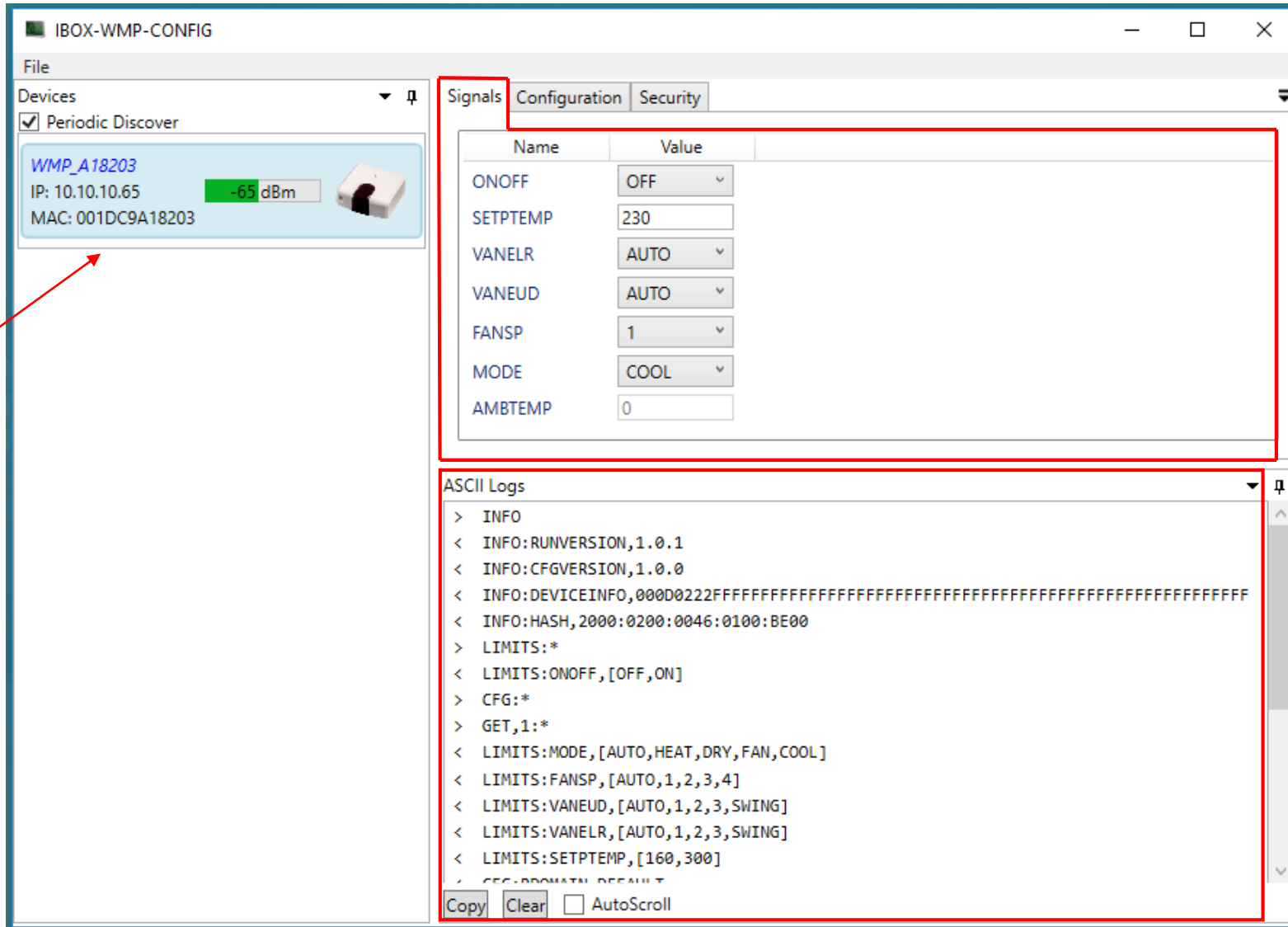
Automatic: It is the standard system, all the networks available are listed and can be selected.

Manual: The network details must be introduced manually (useful for hidden SSIDs).

WPS: For this option the router must support WPS.

The devices can be configured as DHCP or static IP.

7. FREE CONFIGURATION TOOL: IBOX-WMP



The screenshot shows the IBOX-WMP-CONFIG application interface. It is divided into three main sections:

- Devices:** A list of discovered devices. One device is highlighted: **WMP_A18203** with IP: 10.10.10.65, MAC: 001DC9A18203, and a signal strength of -65 dBm. A small image of the device is shown next to it.
- Signals:** A table of configuration parameters with columns for Name and Value.

Name	Value
ONOFF	OFF
SETPTEMP	230
VANELR	AUTO
VANEUD	AUTO
FANSP	1
MODE	COOL
AMBTEMP	0
- ASCII Logs:** A log window showing the communication between the PC and the AC unit. The log content is:

```
> INFO
< INFO:RUNVERSION,1.0.1
< INFO:CFGVERSION,1.0.0
< INFO:DEVICEINFO,000D0222FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
< INFO:HASH,2000:0200:0046:0100:BE00
> LIMITS:*
< LIMITS:ONOFF,[OFF,ON]
> CFG:*
> GET,1:*
< LIMITS:MODE,[AUTO,HEAT,DRY,FAN,COOL]
< LIMITS:FANSP,[AUTO,1,2,3,4]
< LIMITS:VANEUD,[AUTO,1,2,3,SWING]
< LIMITS:VANELR,[AUTO,1,2,3,SWING]
< LIMITS:SETPTEMP,[160,300]
< CFG:DDMATH,DEFAULT
Copy Clear AutoScroll
```

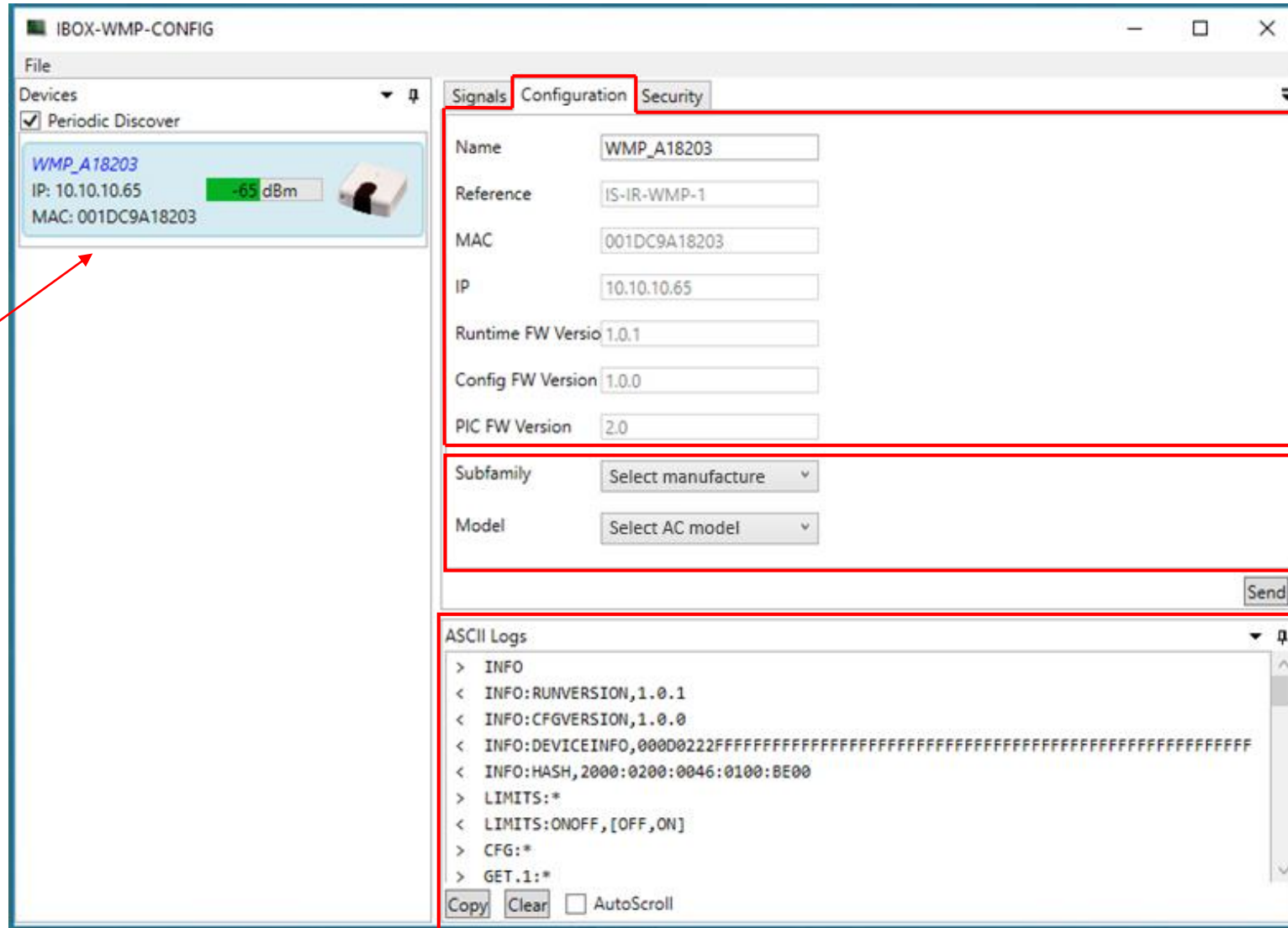
The devices present in the network are discovered periodically

The devices are listed and some general information showed:
- Name
- IP address
- MAC address
- Wifi signal power (dBm)
- Product image

Signals window:
Send and receive commands between the PC and the AC units. Useful for testing and start ups.

ASCII Logs:
This window shows the ASCII commands sent by the Intesis product or received from the AC controller.
> : Sent
< : Received

7. FREE CONFIGURATION TOOL: IBOX-WMP



The devices present in the network are discovered periodically

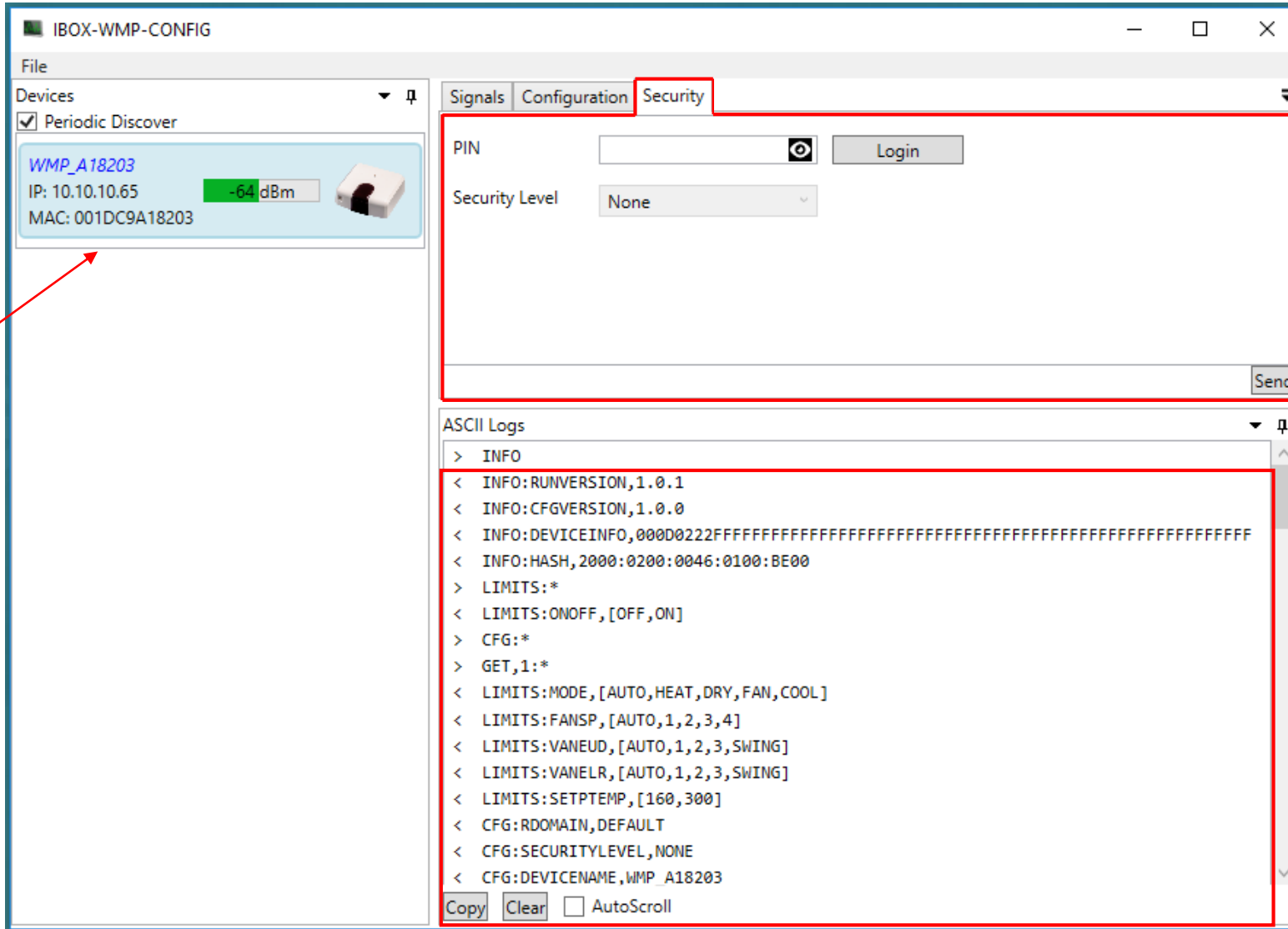
The devices are listed and some general information showed:
- Name
- IP address
- MAC address
- Wifi signal power (dBm)
- Product image

Configuration window:
Display of general information. The name of the device can be modified.

For the IR device:
The manufacture and model of the AC to be controlled can be selected.

ASCII Logs:
This window shows the ASCII commands sent by the Intesis product or received from the AC controller.
> : Sent
< : Received

7. FREE CONFIGURATION TOOL: IBOX-WMP



The screenshot shows the IBOX-WMP-CONFIG application interface. The window title is "IBOX-WMP-CONFIG". It has a menu bar with "File". Below the menu bar are three tabs: "Signals", "Configuration", and "Security". The "Security" tab is active and contains a "PIN" input field with a "Login" button, a "Security Level" dropdown menu set to "None", and a "Send" button. The "Configuration" tab is also visible and contains an "ASCII Logs" window showing a list of commands and responses. The "Devices" section on the left shows a list of discovered devices, with "WMP_A18203" selected. A red box highlights the "Security" tab and its contents. Another red box highlights the "ASCII Logs" window. A third red box highlights the "Devices" list. Arrows point from external text boxes to these elements.

The devices present in the network are discovered periodically

The devices are listed and some general information showed:

- Name
- IP address
- MAC address
- Wifi signal power (dBm)
- Product image

Security window:
A security PIN can be created to access to the product configuration and to encrypt the communication.

ASCII Logs:
This window shows the ASCII commands sent by the Intesis product or received from the AC controller.

> : Sent
< : Received

THANKS FOR YOUR ATTENTION