

GMVs ACCESSORIES

INFORMATION DOCUMENT

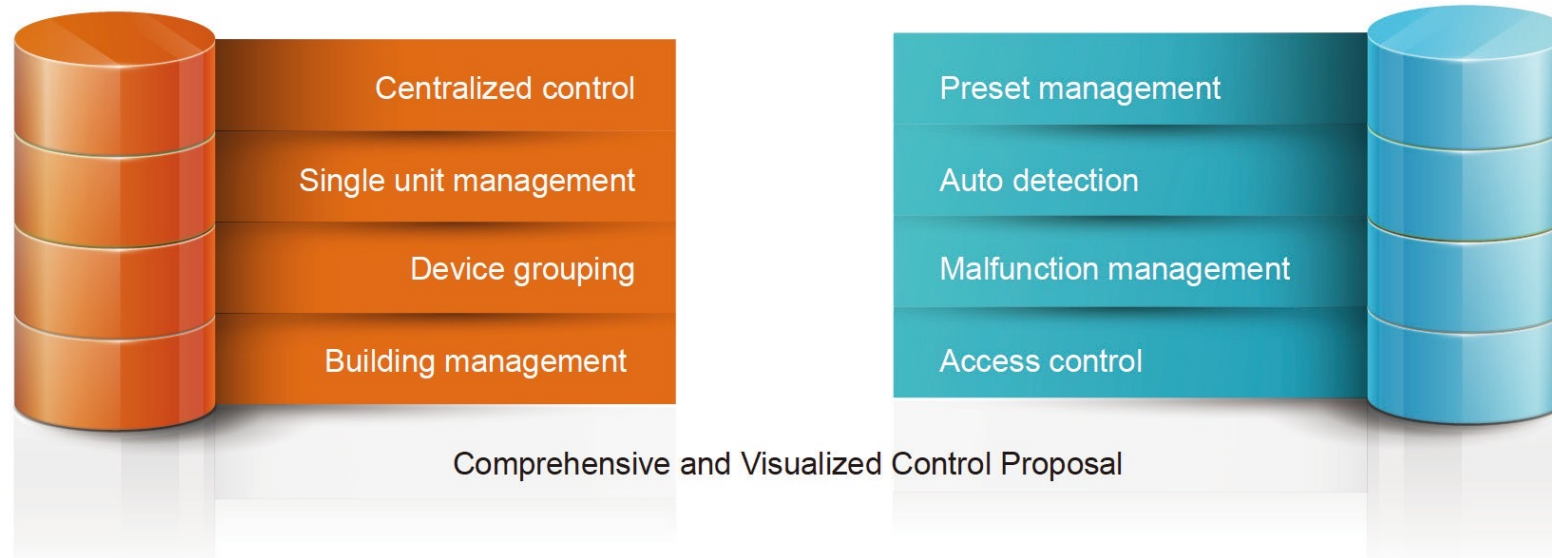
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a. Intelligent remote eudemon

With the design philosophy of to be intelligent, smart, inclusive and compatible, Gree developed the Intelligent Remote Eudemon System for VRF units, providing users with a distributed remote monitoring system for VRF units



a. Intelligent remote eudemon

Functions

Device monitoring: It can monitor and control the parameters of every air conditioning device within the system.

Remote control: Administrator can log in the control system through web browser on any kinds of terminals (from a long distance).

Malfunction alarm: When an air conditioning device is malfunctioning, the system will report in real time and display malfunction details to users or after-sales service staff for the convenience of locating malfunction and timely maintenance.

Property management: It provides three viewing and control modes in regard to devices, engineering and grouping.

Schedule management: It provides customized schedule pre-set mode and auto switch between “workday mode” and “holiday mode”, satisfying different scheduling demands.

Features

Distributed design for balancing the load: The gateway has independent logical memory capability and can perform data processing for the first time, reducing the pressure on server.

Adopt WEB technology based on HTML5, control the system anywhere: The software adopts B/S structure. You can control the system on different platforms and terminals.

Design according to the project, increase interactive experience for convenient debugging and use: It adopts visual interactive design, supports one-button import of details, engineering information, and so on, making the modification and debugging more convenient, and reliable

Fast, reliable and in real time: You can view units' condition in real time and control over 4,000 air conditioners in seconds.

Intelligent Multi-function gateway

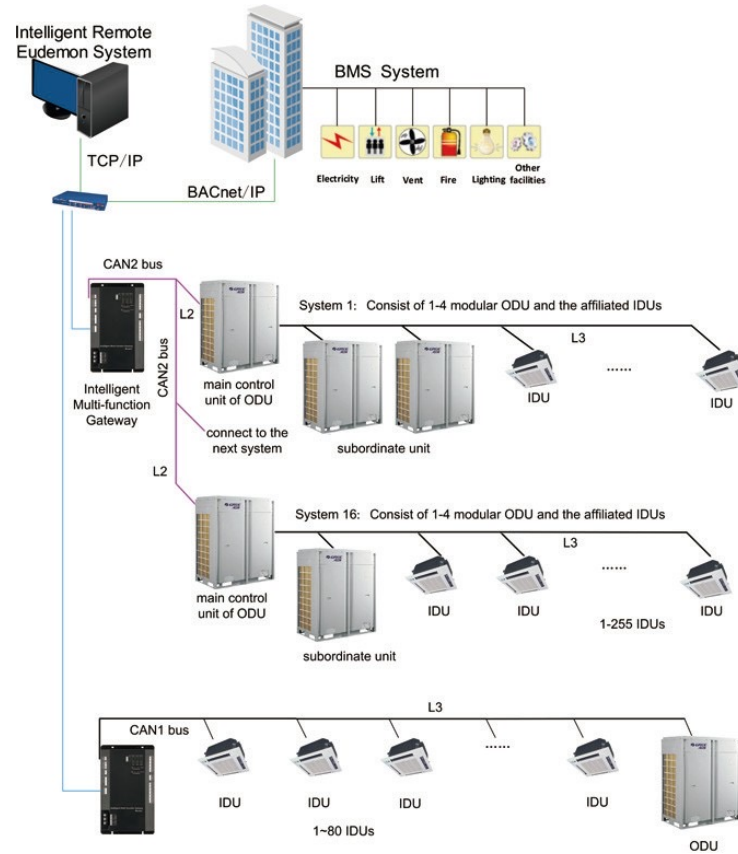
Functions

The multi-function gateway integrates remote monitoring gateway with BACnet/IP protocol function:

1. Ethernet interface, support TCP/IP and UDP functional protocol, can conduct real-time interaction with the upper-level unit;
2. Support standard BACnet/IP protocol;
3. User can self-define and collocate the gateway parameters for embedded webpage.

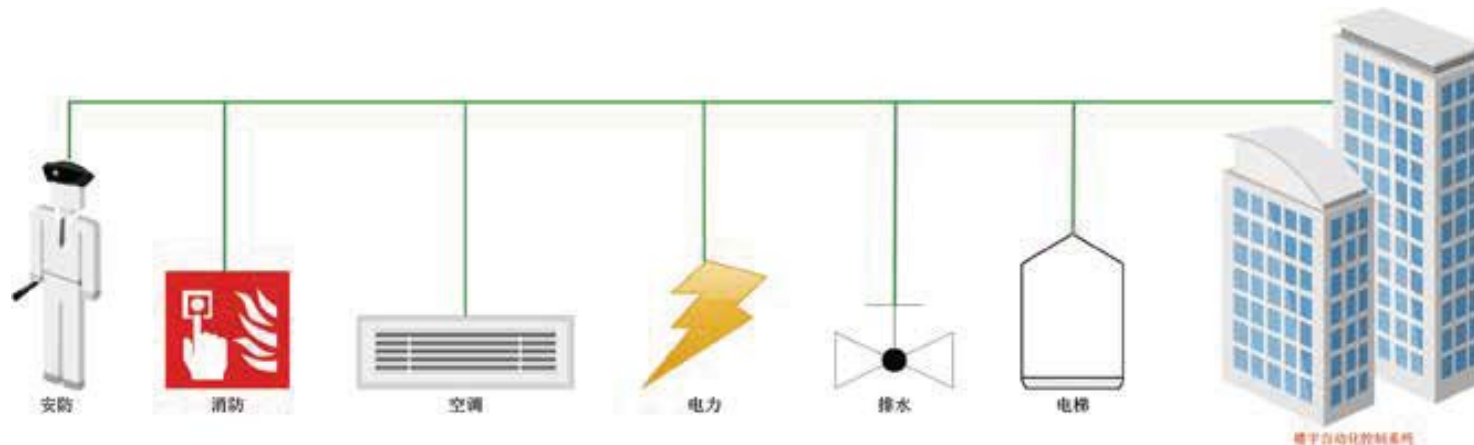


Distributed structure



b. Building protocol gateway

Air conditioner is a kind of indispensable equipment in the building, which has higher and higher requirement of automation and intelligence. In order to meet the demand of users solve the problems of air conditioner monitoring and automatic control, Gree has developed multiple building protocol gateways for connecting to different BMS or BAS systems.



1. CONTROL SYSTEMS

BACnet Gateway



Functional features

Large network capacity: can support 16 systems or 255 sets of IDU at most

Group control function: supports group control ON/OFF of units.

Long distance monitor: supports the remote control of ON/OFF of unit, temperature setting, mode setting, fan speed setting, and shielding function, etc., and can achieve real-time monitor of operating status.

Easy control: BACnet Gateway supports collocating gateway IP and related data for embedded webpage, thus user can self-define the gateway IP according to actual situation.

I/O expansion: supports 5 digital input (DI) and output (DO) interfaces

Strong points

Provide standard BACnet/IP protocol interface, open the table of protocol point: provides standard BACnet/IP protocol interface, open the table of BACnet protocol Point, for the integration of the building of user.

Adopt HTML5 technology, adapt to different environment: embedded webpage is developed by adopting HTML5 technology, which can set the gateway IP and related information in Windows system, Linux system, or MAC OS system.

With ETL and CE certification: has been rewarded with the north America ETL and EU CE safety certification.

Modbus Gateway



Functional features

Large network capacity: can support 16 systems or 255 sets of IDU at most

Group control function: supports group control ON/OFF of units.

Long distance monitor: supports the remote control of ON/OFF of unit, temperature setting, mode setting, fan speed setting, and shielding function, etc., and can achieve real-time monitor of operating status.

I/O expansion: supports 5 digital input (DI) and output (DO) interfaces

Strong points

1 gateway can monitor 255 indoor units

Linkable with other networks: 5 ways of digital input and output enables flexible connection to other networks

Fire alarm interface for auto stop: When fire alarm goes off, units can be automatically turned off through the fire alarm interface, which will lower the risk of damage for the units

Provide standard Modbus RTU protocol interface, open the table of protocol point

With ETL and CE certification has been rewarded with the north America ETL and EU CE safety certification.

Modbus Gateway (Mini)



Functional features

Network capacity: can support 16 systems or 128 sets of IDU at most

Group control function: supports group control ON/OFF of units temperature setting, mode setting, fan speed and locking functions

Long distance monitor: supports the remote control of ON/OFF of unit, temperature setting, mode setting, fan speed setting, and shielding function, etc., and can achieve real-time monitor of operating status and error status.

Strong points

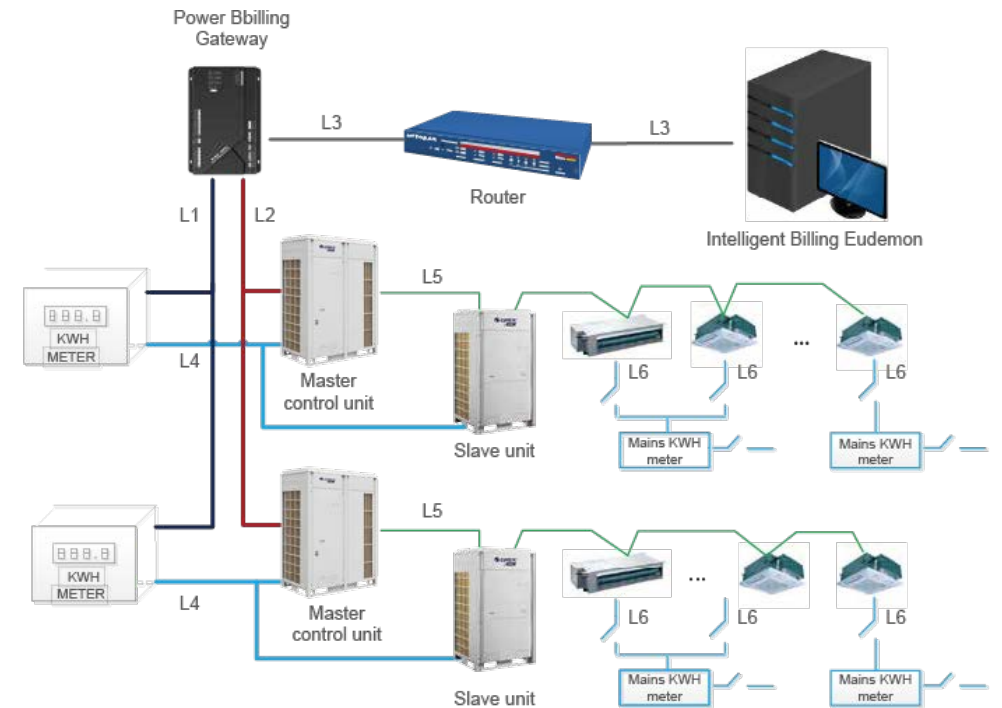
Compact size, easy installation: Dimension of Modbus Gateway (Mini) is 90*55*20mm, which can be placed in anywhere satisfies the using condition, which can be fixed with only two screws.

Provide standard Modbus RTU protocol interface, open the table of protocol point

With ETL and CE certification has been rewarded with the north America ETL and EU CE safety certification.

Gree Intelligent Billing System is a solution to power consumption calculation and billing specialized for VRF units. This system adopts Gree's unique calculation method that makes the billing more reasonable. In design, it's tailored to the features of engineering construction, making the installation less difficult. It can be widely applied in shopping centres, apartment blocks, villa clusters or other commercial or residential occasions in different sizes and for different purposes.

c. Intelligent billing Eudemon



L1: RS485 bus for communication between gateway and KWH meter;
 L2: CAN2 bus for communication between gateway and unit;
 L3: Cable;
 L4: ODU power supply cord;
 L5: CAN1 bus for communication between IDU and ODU;
 L6: IDU power supply cord;

Note:
 (1) 15 systems or 255 indoor units can be connected to one Power Billing Gateway;
 (2) 16 Power Billing Gateways can be connected to one set of Intelligent Billing Eudemon;
 (3) One multi VRF system should be configured with one KWH meter.

Functions

Billing management: Properly distribute the electricity automatically

Arrearage shutdown: When the air conditioner is not available due to overdue bill or other reasons, the shielding function can limit the operation of some of IDU or deactivate some of the functions.

Long distance control: The administrator can log in the system via browser of any terminals, and conduct long-distance control related controllable parameters according to the billing or using situation

Error alarm: When the air conditioning equipment is faulted, the system will report in real time, and display the detailed information of error, and at the same time record to the system database as one of the billing basis.

Property management: You may name the project, floors, tenants, and even set "alias" for indoor units. Details can be imported by one button, convenient for building management.

c. Intelligent billing Eudemon

Highlights

Distributed design for balancing the load: The gateway has independent logical memory capability and can perform data processing for the first time, reducing the pressure on server.

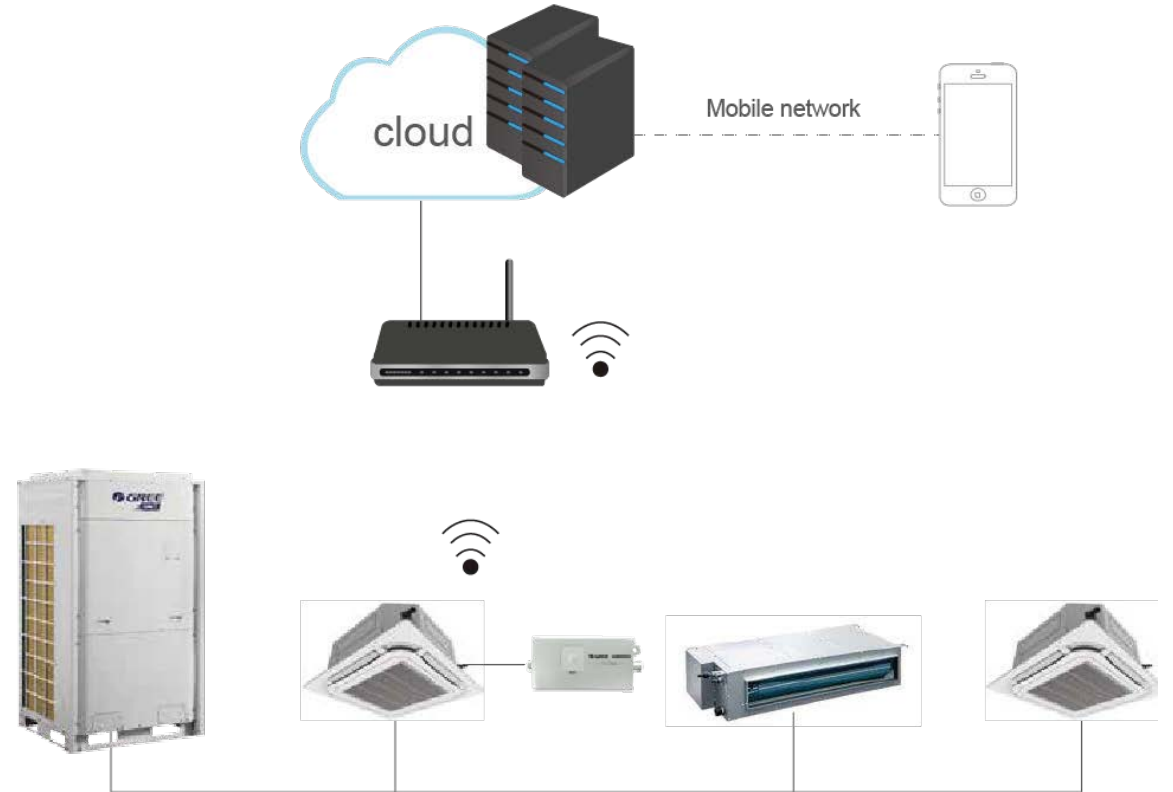
Adopt WEB technology based on HTML5, control the system anywhere: The software adopts B/S structure. You can control the system on different platforms and terminals.

Design according to the project, increase interactive experience for convenient debugging and use: It adopts visual interactive design, supports one-button import of details, engineering information, and so on, making the modification and debugging more convenient, and reliable

Compatible to different electric meters.

G-Cloud is a new generation WIFI smart controller of Gree commercial units. It adopts a way of operation different from remote control or wired control. It can display air conditioner running status directly to users, who can conduct point-to-point control over air conditioners through an APP. It is an important part of Gree smart home. G-Cloud is designed for intelligent home control, such as preset control, long-distance control, scene management, malfunction reminding and family access management.

d. G-Cloud



CAN1 network, multi VRF cloud control supports 80 indoor units in a single system, to realize long-distance control

Highlights

Lightweight: Compact and easy to install, no need of external power source; power supplied by equipment, available for use right after connection; a shielded wire of 4 cores is required for connection; easy operation; GREE+APP easy user configuration; quick guidance is provided, with simple and clear display.

Smart and long distance control: User can set the running status of the cooling system based on a set of rules; long-distance control allows you to master your home appliances at any time.

Capability: Multi VRF cloud control; one set of device is capable of controlling up to 80 sets of indoor units in a single system; applicable to villas, office buildings, shopping malls, hotels, etc.

Sensitive: Monitor the units and detect errors.

e. Wired controller and remote controller

There are two kinds of controllers: wired controller and remote controller. The system provides various controls for users, such as cooling, heating, dehumidifying and fan etc, users can select it flexibly according to their own using methods.

Wired controller XK46



- LCD with background and white words; touch buttons
- Clock can be displayed and set; 24 hours timer setting for on/off
- 7 levels of fan speed, up & down swing and left & right swing
- Can be switched in auto, cooling, dehumidifying, fan, heating, floor heating, 3D heating and space heating operation modes.
- Master and slave wired controllers can be set; simultaneous control over several IDUs is available
- Available functions: sleep, ventilation, quiet/auto quiet, light, energy saving, auxiliary heating, drying, memory, low-temperature dehumidifying, absence in heating, controllable auxiliary heating in dehumidifying, filter cleaning reminder, etc.
- With project parameters viewing and setting functions.
- Detect ambient temperature; receive infrared remote controller signal

e. Wired controller and remote controller

Wired controller XK79 (For hotel)



- Small and fashionable appearance with thickness only of 12mm and back lighting LCD with black background and white words
- Eight touch buttons
- Clock can be displayed and set countdown and clock timer
- Besides normal functions, other functions such as low-temperature dehumidifying, absence in heating, controllable auxiliary heating in dehumidifying and filter cleaning reminder can also be set
- Door control system can be connected

e. Wired controller and remote controller

Remote controller YAP1F



- Can be switched in auto, cooling, dehumidifying, fan and heating operation modes.
- Besides turbo, 6 levels of fan speed can be set.
- Available functions: child lock, drying, health, ventilation, turbo, sleep, light, absence, I-feel and
- Clock display and indoor/outdoor ambient temperature viewing functions.
- Up & down swing and left & right swing

e. Wired controller and remote controller

Wired controller XK55



- Elegant appearance.
- High resolution colour LCD.
- Capacitive touch control; receive infrared remote controller signal.
- Various timing functions: three weekly timers and one countdown timer can be set simultaneously. Mode, temperature and fan speed can be pre-set in weekly timer.
- Complete system functions; each function will be implemented in an individual page with interactive and humanized interface.
- Various personalized functions e.g. Setting brightness and backlit time.
- Sufficient viewing functions, e.g. viewing on/off status and after-sales service hot line.

Wired controller XK86



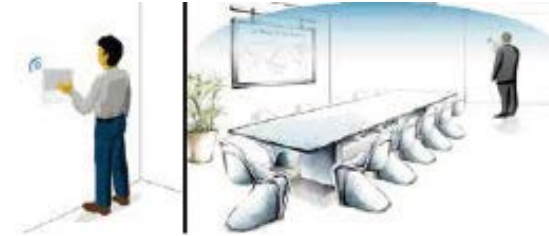
- Elegant appearance.
- Touch buttons with back lighting LCD.
- Chinese and English display can be switched; with weekly timer function.
- Complete system functions with each function implemented in an individual page.
- Refreshing, auto dehumidifying, absence and other modes can be set
- Detect ambient temperature precisely.
- With electricity consumption inquiry function.
- With service hotline inquiry and after-sales phone number records function.

f. Wired controller and remote controller connectivity



Single control of one unit

Each indoor unit has an independent controller



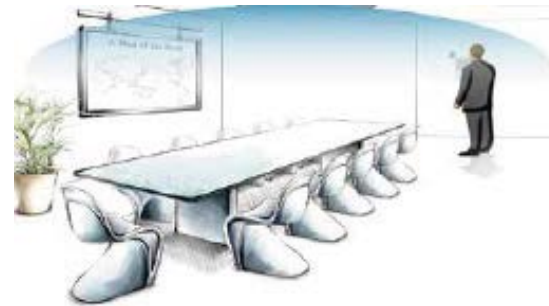
Multiple control of one unit

One indoor unit can be controlled by several wired controllers at different places.



Central control of several indoor units

One wired controller can control as many as 16 indoor units



Joint control of remote controller and wired controller

Users can control one unit with two types of controllers: a remote controller which is convenient and flexible or a wired controller which includes every function of an air conditioner.

g. Smart zone controller and central controller

E-smart zone controller CE54-24/F(C)



- Adopt built-in type installation; the exposed part is only 11mm.
- High resolution colourful LCD.
- 4.3 inch capacitive touch screen for easy operation; with single indoor unit control (including general functions and advanced functions), group management (supporting DIY group), single indoor unit and group indoor units timer functions; (general function: ON/OFF, Mode, Set, Fan, Swing, etc.; advanced functions: Save, Sleep, E-heater, Absence, Quiet, Turbo, etc).
- With long distance shield function (shield switch, mode, set, etc) for single unit, group and all indoor units.
- Support denomination for indoor units, and icon selection, realizing individual management.
- Support maximum 32 indoor units, with powerful function.
- Indoor or outdoor unit network can be connected, simple and flexible. 100~240V super wide voltage for independent power supply, stable and reliable.
- With functions of engineering setting, parameters view, malfunction view and authority management, easy debugging and maintenance.

g. Smart zone controller and central controller

Central controller CE52-24/F(C)



- High resolution colourful LCD.
- 7" capacitive touch screen for easy operation.
- With project setting, parameter viewing, malfunction record and access management functions.
- With various functions: centralized control (control all indoor units), group management (support DIY grouping), schedule management (setting of several schedules) and single unit control (on/off, mode, temp settings, fan speed, quiet, swing control etc).
- Shielding function of single unit, group and all IDUs (shielding on/off, mode, temp setting, etc).
- Provide naming of indoor units, selection of icons and personalized setting (setting background, backlight, etc).
- Up to 255 units can be centrally controlled.
- Elegant and fashionable appearance.
- Embedded installation in wall with projecting thickness only of 11mm.
- Connectable with network of indoor units or outdoor units.
- Independent power supply in 100~240V wide voltage range.