Midea

V8VRF

Controller Catalogue

SMART IN ONE

Midea Building Technologies Division

Midea Group

Quality Assurance
ISO 9001

Environmental Management
ISO 14001

Occupational Health and Safety Management
ISO 45001

Midea MBT

Midea MBT (Midea Building Technologies) is a key division of the Midea Group, a leading provider of comprehensive solutions of intelligent building, involving energy sources, elevators, control systems, and heating, ventilation & air conditioning. Midea MBT has continued with the tradition of innovation upon which it was founded and emerged as a global leader in the HVAC and building management industry. A strong drive for advancement has resulted in an extensive R&D department that has placed Midea MBT at the forefront of a competitive edge. Through these independent projects and joint-cooperation with other global enterprises, Midea has supplied thousands of innovative solutions to customers worldwide.

3 businesses constitute the significant components of Midea intelligent building solutions

- M-BMS
- HVAC
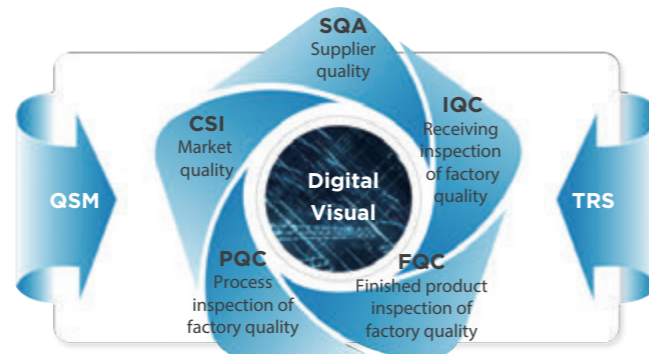- Elevator
- MBT

4 production bases can achieve fast delivery

CLIVET
Italy
Feltre

China
Guangdong
Hefei
Chongqing

Over 100 testing labs cover all different real application sceneries

- Security construction
- Noise
- Performance
- Environmental Simulation
- Reliable & long-lasting operation
- EMC lab

All products can be visualized and digitalized throughout entire process

- SQA Supplier quality
- IQC Receiving inspection of factory quality
- CSI Market quality
- Digital Visual
- QSM
- TRS
- PQC Process inspection of factory quality
- FQC Finished product inspection of factory quality

Midea VRF History

1999
- Cooperated with Toshiba in inverter technologies

2005 V3
- Launched V3 Series VRF AC inverter + fixed compressor
- Maximum capacity of single unit is 16HP

2008-2014 V4
- Launched V4, D4 Series VRF
- Complete product line with heat pump series, heat recovery series and water-cooled series.
- Maximum capacity of single unit is 16HP

2014 V5X
- Launched V5X Series VRF
- Full DC inverter technology
- Maximum capacity of single unit is 22HP

2017-2020 V6
- Launched heat pump V6 Series VRF, cooling only VC Pro Series VRF and heat recovery V6R Series VRF
- Full DC inverter technology
- Maximum capacity of single unit is 32HP

2022 V8
- Launching the 8th generation V8 Series VRF
- Full DC inverter technology
- Maximum capacity of single unit is 42HP

Benefits of Midea VRF

For End-users

Healthy Operation

Cost Saving Operation

Comfortable Environment

For Consultants

Diversified Solutions

Professional Tool and Support

Design Flexibility

For Building Owners

Energy Saving Management

Reliable Operation

Backup Solution

For Construction Companies

Green Solutions

Space Saving Design

Intelligent Management

Application Solutions

Office Complexes

Enjoy comfort while working

Be it small or large sized, Midea VRF provides solution for all office buildings and its smart control solutions makes the management of VRF simple and easy whereas the wide variety of indoor units are suitable for all designs.

Residential Apartments

One for every home

The compact size and high efficiency make Midea VRF suitable for all residential homes.

Hotels & Shopping Malls

Increase your business, not your bills

The high efficiency and reliability of Midea VRF makes it suitable to be used for all commercial applications. The intelligent control solutions like hotel key cards and touch screen controller makes the management easy.

Hospitals/ Schools/ Airports

Meeting all expectations

The innovative design and a variety of indoor unit choices makes Midea VRF suitable for all kinds of applications. The newly designed puro-air kit is perfect for modern hospitals.
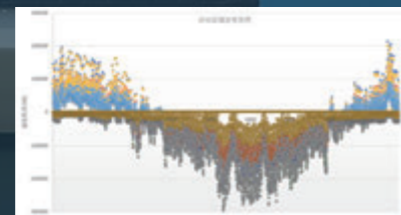
ALL DIGITALIZED SERVICE
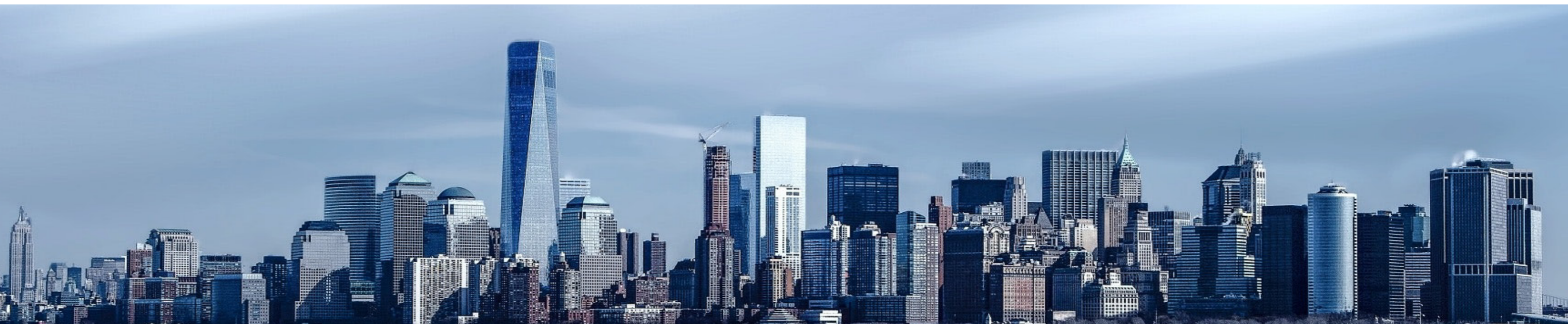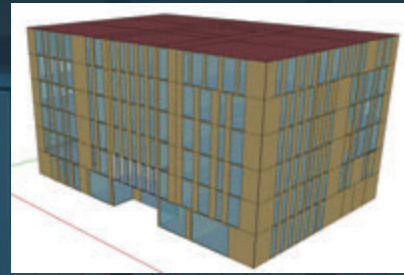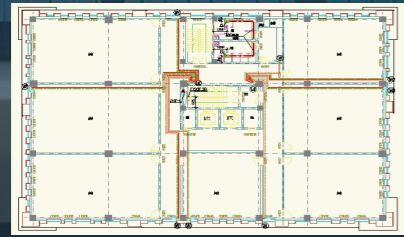
Design Service

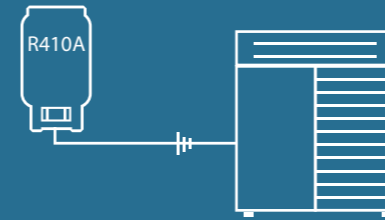Energy Plus
Building load
calculation

BIM
building
information
import

MSSP Online
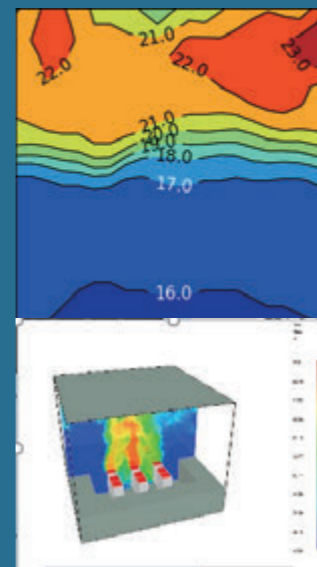VRF system design

Installation service

R410A

Automatic refrigerant
charge

Automatic commissioning
report

MCFD
Energy consumption
and airflow simulation
optimization

Management service

The probability of
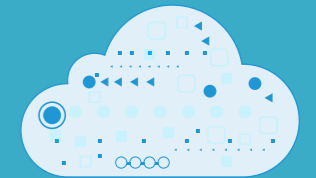Filth blockage 80%

Degradation of energy
efficiency 25%

Continuous energy
saving service

After-sales service

Intelligent mainte-
nance tool

Cloud-based big
data analytics

2 +10 +N Spare Parts
Layout can ensure
the timely supply of
global after-sales
spare parts.

Technical Support Platform (TSP)

TSP is a platform for customers to provide professional technical support. Through TSP, you can inquire product information, documentation, spare parts and trouble-shooting, initiate technical questions and quality com-plaint process, and also support self-service spare parts order.

Website address: https://tsp.midea.com/

My order

Inquire spare parts from exploded view and place spare parts order directly in TSP.

Document inquiry and download

View or download product technical documen-tation online, such as catalogs, images, training PPTs, etc.

Technical inquiry & FAQ

Initiate technical questions online, and our technicians answer them online in time.
Find a quick solution in the FAQ.

Troubleshooting

Query the error code and solution by SN, model name, error code or product type.

Complain

Initiate the product quality complaint process online, and our after-sales engineers handle related complaints in time.

Mobile Intelligence Service App (MISA)

MISA is the mobile terminal of TSP, with the same functions as TSP. The mobile service makes technical support more timely and convenient.
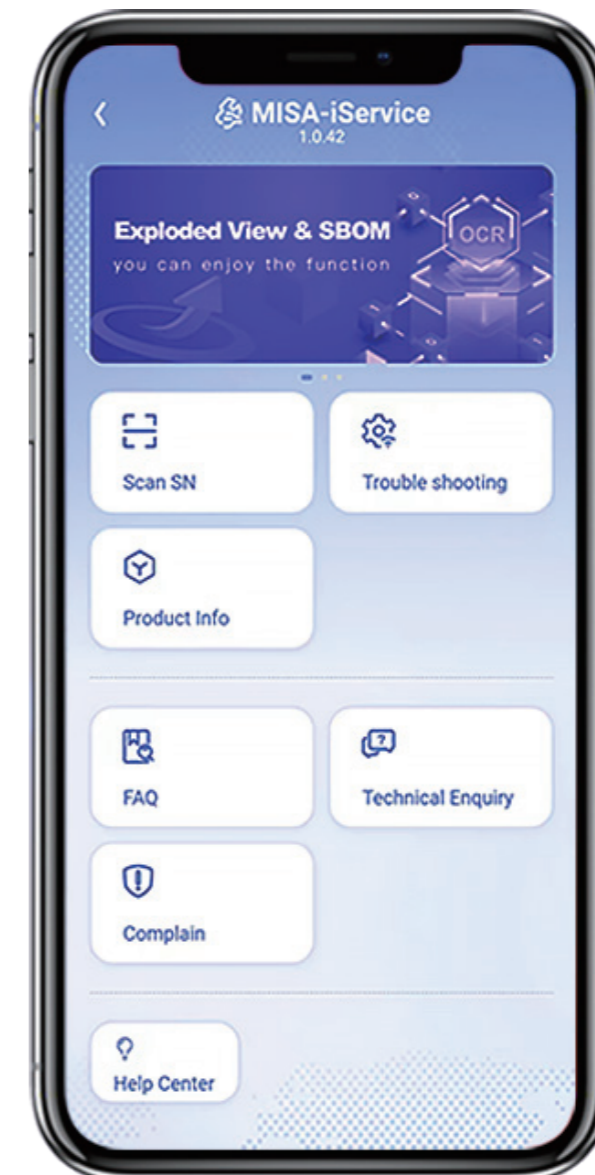
https://link.midea.com

FAQ

Complain

Technical Enquiry

Search product manuals

Trouble shooting

Spare Parts list

Download

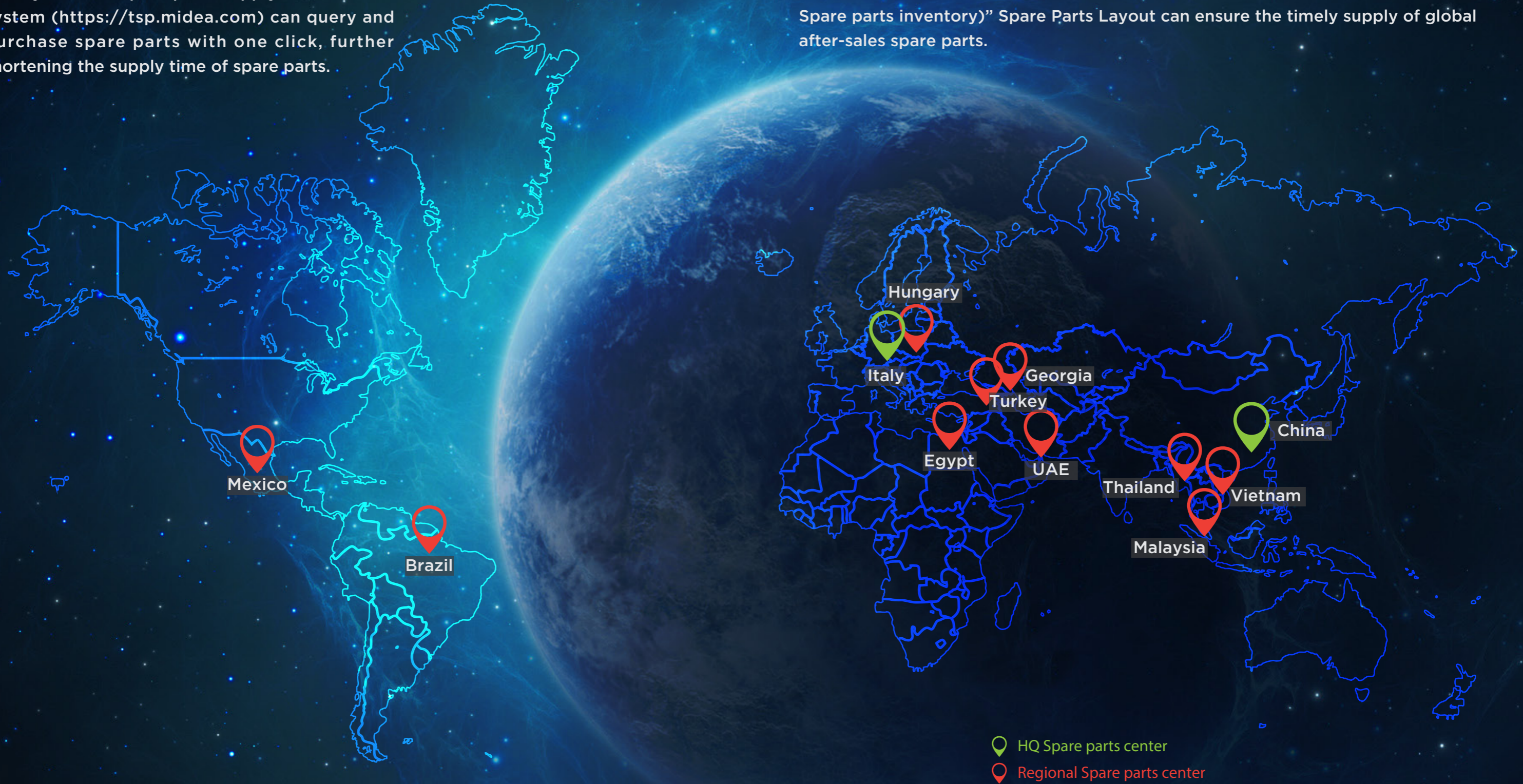Scan above to download the mobile app

Feedback

Thank you very much for your attention and advice

Midea Global Spare Parts Center

The global spare parts center provides high quality and fast spare parts supply. Midea online system (https://tsp.midea.com) can query and purchase spare parts with one click, further shortening the supply time of spare parts.

The "2 (HQ Spare parts center) +10 (Regional Spare parts center) + N (Country Spare parts inventory)" Spare Parts Layout can ensure the timely supply of global after-sales spare parts.

Hungary

Italy

Georgia

Turkey

China

Mexico

Egypt

UAE

Thailand

Vietnam

Brazil

Malaysia

⬤ HQ Spare parts center
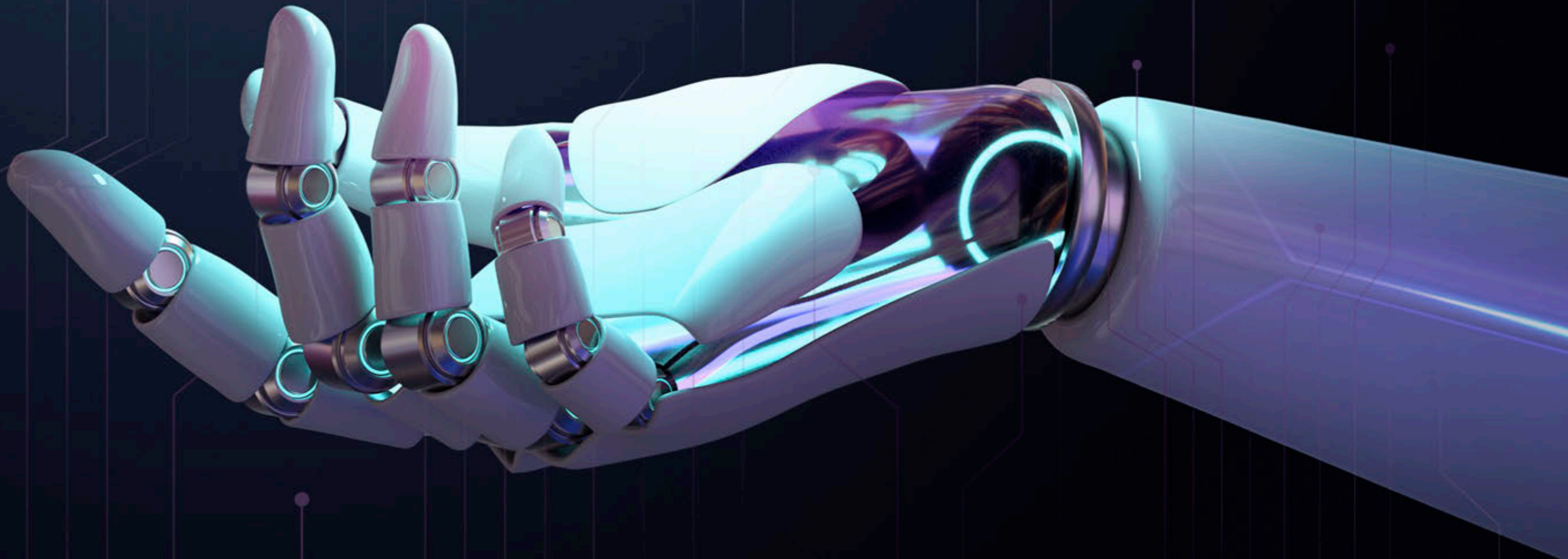
⬤ Regional Spare parts center

CONTROL SOLUTIONS

Remote Controllers
Wired Controllers
Centralized Control Solutions
Network Control System
BMS Gateways
Accessories
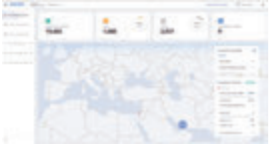
CONTROLLER LINEUP

Wireless Remote Controllers	Wired Remote Controllers	Centralized Control Solutions	
RM12F1	WDC3-86S		
RM12F	WDC3-86T	TC3-10.1	
	WDC3-120T	IMMPRO II	

Network Control System	BMS Gateways	Accessories	
GW3-CLOUD +	GW3-BAC		
GW3-CLOUD +	GW3-MOD	MA3-EK	
GW3-CLOUD + Cloud Control/ APP	GW3-LON	DIAGNOSIS(A)	
	GW3-KNX		

META is the abbreviation of Midea Evaporating Temperature Alteration
Further upgraded META technology to maximize ENERGY SAVING.

Remote Controllers

Wired Controllers

Features

Model	RM12F1	RM12F
On / Off	●	●
Mode selection	●	●
Temperature setting	● (0.5°C or 1°C steps)	● (0.5°C or 1°C steps)
7-speed fan control	●	●
Auto swing	●	●
5-step swing louver	●	●
Address setting	●	●
Follow me	✕	●
Eco mode	●	●
Silent mode	●	●
Display shut-off	●	●
Daily timer	●	●
Self Cleaning Mode setting	●	✕
Sterilization function setting	●	✕
Keyboard lock	●	●
Background light	●	●
Indoor Unit parameter setting	●	●
Dimensions (H×W×D) (mm)	170×48×20	170×48×20
Batteries	1.5V (LR03/AAA) × 2	
Indoor unit series	V8 IDU, 3rd and 2nd generation IDU	

Note:
●: equipped as standard; ✕: without this function

Follow Me

With the follow me function, the indoor unit responds to the temperature measured by the temperature sensor built-in to the wireless remote controller, rather than the temperature sensor in the indoor unit itself, enabling more precise control of the temperature in the user's immediate environment.

5 Swing Angles for Louver

Thanks to the 5 swing angles for indoor unit louver, the air flow direction can be controlled more precisely.

Step
Swing
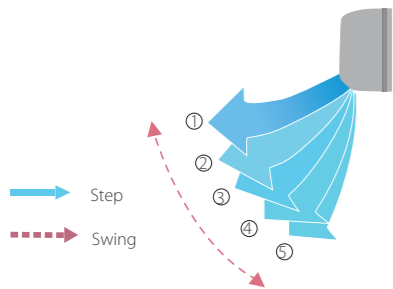
Multiple Fan Speed Control

The DC Series comes with 7 indoor fan speed options and AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.

7 fan speeds DC IDUs
Speed 7
Speed 6
Speed 5
Speed 4
Speed 3
Speed 2
Speed 1

Exercise time strong airflow
Leisure time gentle airflow
Rest time soft airflow

3 fan speeds AC IDUs
Speed 3
Speed 2
Speed 1
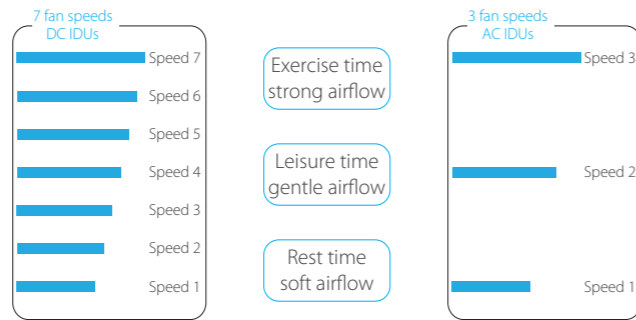
Self Cleaning Mode setting

Can be turned on Self Cleaning mode.

ON

Frosting
Frost makes the surface of heat exchanger dirt stripping

Defrosting
Water flow flushes dirt from heat exchanger

Drying
55°C high temperature drying water, effective sterilization

*The self clean function is only available for V8 mini VRF.

Sterilization function setting

If the sterilization function is available for the indoor unit, it can be turned on or turned off using this setting.

ON/0ff

Plasma Module
Catalytic Oxidation Module
Ozone Purification Module

Features

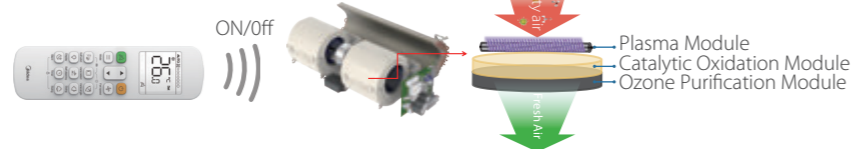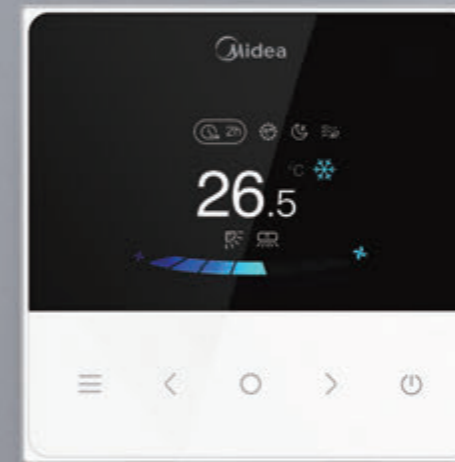| Model	WDC3-86S	WDC3-86T	WDC3-120T
On / Off	●	●	●
Mode selection	●	●	●
Temperature setting	● (0.5℃ or 1℃ steps)	● (0.5℃ or 1℃ steps)	● (0.5℃ or 1℃ steps)
Dual temperature set points	×	●	●
App control	×	●	●
7-speed fan control	●	●	●
Auto swing	●	●	●
5-step swing louver	●	●	●
Address setting	●	●	●
Follow me	●	●	●
Meta mode	●	●	●
Room temperature display	●	●	●
℉/℃ display	●	●	●
Keyboard lock	×	●	●
Background light	●	●	●
Daily timer	●	●	●
Weekly schedule timer	×	●	●
Auto restart	●	●	●
2 permission levels	●	●	●
Bi-directional communication	●	●	●
Group control	●	●	●
Main or secondary controller setting	●	●	●
Display shut-off	●	●	●
Silent mode	●	●	●
Remote signal receiver	●	●	●
Clean filter reminder	●	●	●
Extension function	×	●	●
Daylight saving time	×	●	●
Clock display	×	●	●
Error check function	●	●	●
System parameter querying	●	●	●
After Hours/Off Timer function	×	●	●
Language	English	14 Languages	14 Languages
One to more control	×	●	●
Dimensions (WxHxD) (mm)	86x86x18	86x86x18	120x120x20
Power supply	18V DC	18V DC	18V DC
Indoor unit series	3rd generation IDU and V8 IDU		

Note:
●: equipped as standard; ×: without this function

Group Control

One controller can be used to unify the settings across up to 16 indoor units.
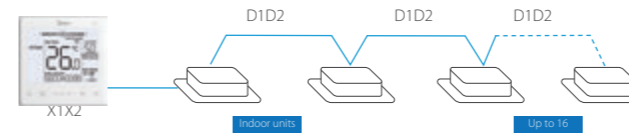
Note: when the 2nd generation AC indoor units connect to group controller WDC-120G/WK, the indoor units need to customize D1 D2 terminals.
Group control is not available for 2nd generation AC Wall Mounted Series.

Main or Secondary Controller Setting

Two controllers can be used together with single indoor unit. Operating mode and settings would be set according to the most recent instruction received. The controller display screens are synchronized so that both displays update when a setting is adjusted.

One indoor unit

Two or more indoor units
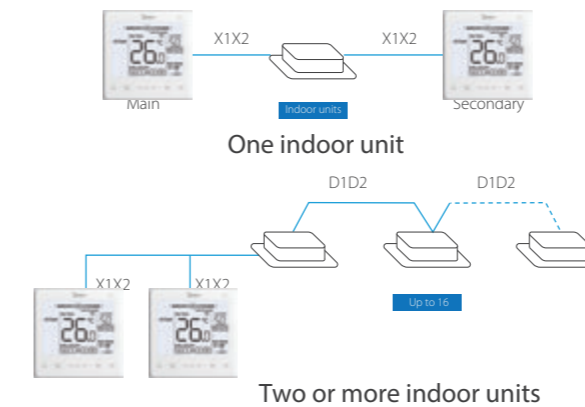
2 Permission Levels

2 permission levels ensure users can easily access control functions and allow administrators convenient access to operating parameters.
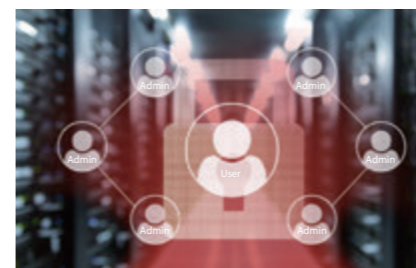
Buzzer Sound On/Off

The buzzer sound of the indoor unit can be turned off to create a quieter environment.

Buzzer

Off Timer Function

We can use the wired controller to set an automatic off timer or after hours function for the indoor unit.
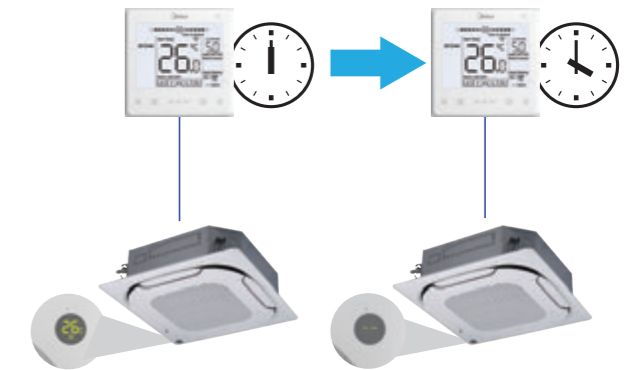
Weekly Schedule Timer

The weekly schedule timer allows users to set multiple schedules each with its own operating mode, temperature settings and fan speeds.

Weekly Schedule

| SUN | MON | TUE | WED | THU | FRI | SAT |

OFF   HEAT   COOL   FAN
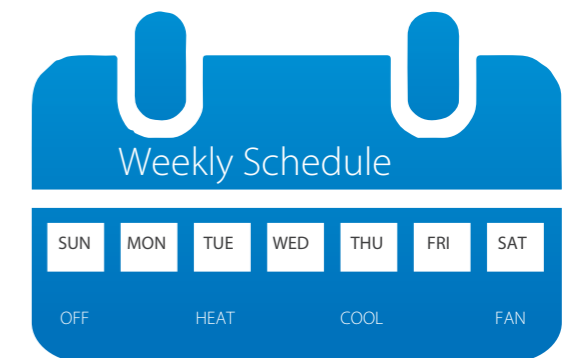
Bi-directional Communication

The wired controller can query the system operating parameters thanks to the new bi-directional communication functionality. In addition, settings including static pressure, cold draft prevention and temperature compensation can be configured on the wired controller.

Bi-directional   Bi-directional

Central Control Solution

Features

Model	TC3-10.1
Max. number of indoor units	384
Max. number of refrigerant systems	48
Touch screen	● (10.1-inch)
On/Off	●
Mode selection	●
Temperature setting	● (0.5℃ steps)*
7-speed fan control	●*
Auto swing	●
5-step swing louver*	●
Room temperature display	●
Holiday setting	●
℃/℉ display	●
Schedule management	●
Clock display	●
2 permission levels	●
Indoor unit type/model recognition	●*
Indoor unit with capacity larger than 16kW recognition	●*
Energy management	●
Group management	●
Error check function	●*
USB output	●
Report display	Error report and operation record
Operation log	●
LAN access	●
Language supported	English,Chinese,Arabic,Spanish,Turkish, Portuguese,Korean,Russian,Italian,Polish,French,German,Georgian
Dimensions (W×H×D)(mm)	270×183×27
Power supply	24V AC
Outdoor unit series or indoor unit series	All V8 series

Note:
●: equipped as standard; ×: without this function

Touch Screen

Colorful touch screen and vivid display make operation more convenient and simple.

Group Management

Units can be viewed according to group, system or location, making unit management clearer and more convenient.
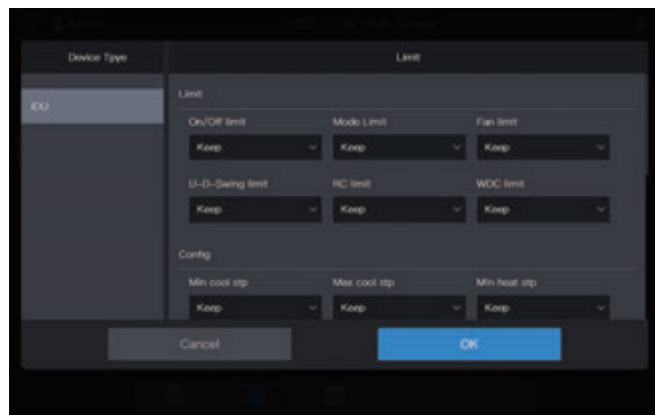

LAN Access

A desktop or laptop PC can be used for browser-based access via a LAN connection.

Energy Management

User can set limits on an indoor unit, such as operation temperature range, fan speed, mode, swing command, on/off command, remote controller signal and wired controller signal.
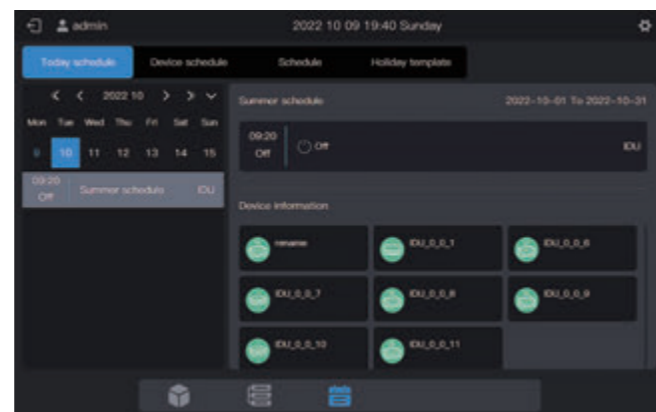

Outdoor Unit Configuration

Outdoor unit configuration and settings can be monitored and controlled without having to go outdoors.

DSM setting | Silent mode setting | Priority mode setting | Emergency stop

Wiring Flexibility

The controllers can be connected to the master outdoor unit directly.

Unit Model Recognition

The controller recognizes the model of indoor and outdoor units and different models are represented by different icons.

Icon	Model	Icon	Model
	Low static pressure and middle static pressure (L-DUCT/M-DUCT)		Vertical concealed installation/vertical surface mounting (FS)
	High static pressure (H-DUCT)		Four-way Cassette
	Purifier (FAPU)		Compact Four-way Cassette (COMPACT)
	Wall mounting (WALL)		Ceiling-floor type (C&F)
	Old IDU (1st Gen. IDU)		Two-way Cassette
	One-way Cassette		CONSOLE
	Group control device icon		New ODU (New generation ODU)

Schedule Management

Daily, weekly or annual schedules can be used to set unit settings such as on/off, operating mode, set temperature, fan speed and swing.
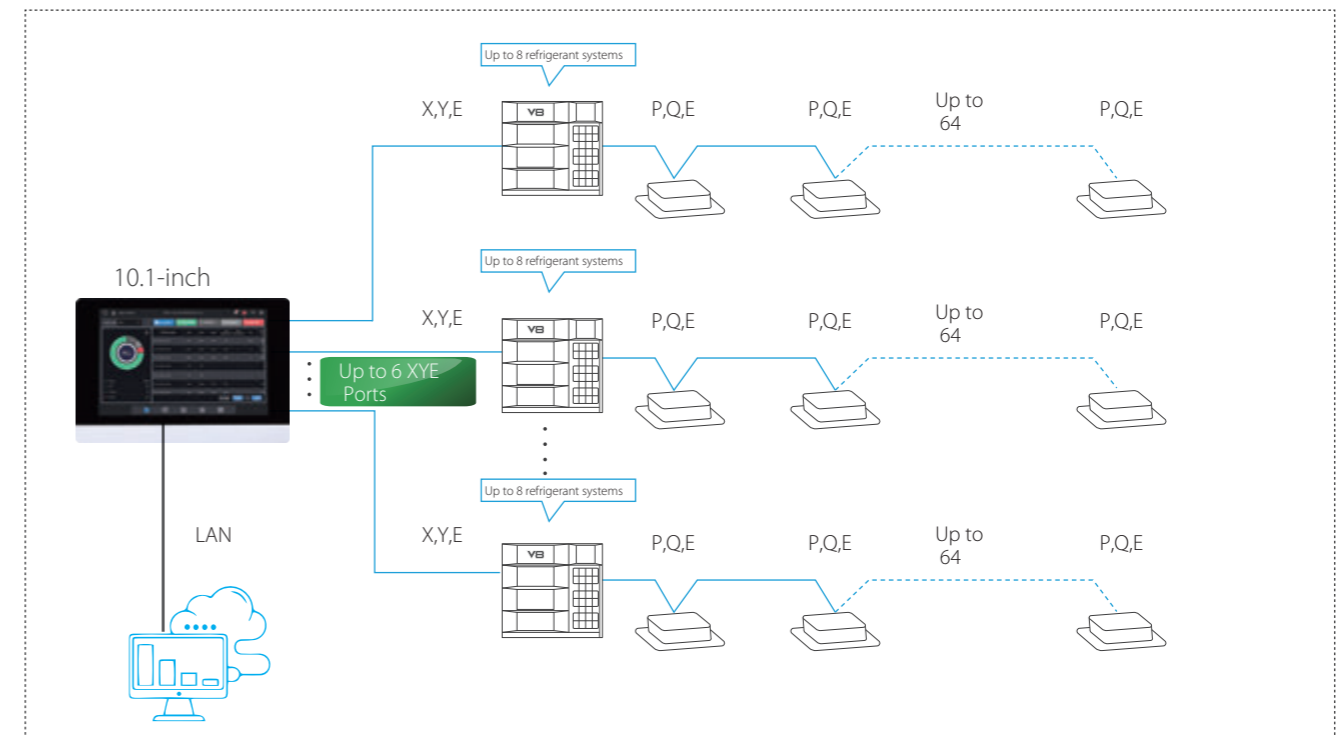
IMMPRO II

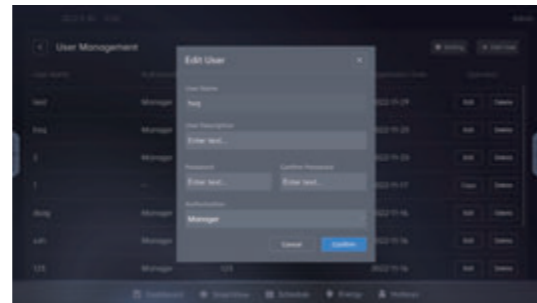| Software model	
	IMMPRO II
On/Off	●
Mode selection	●
Temperature setting	●
7-speed fan contro	●
Auto swing	●
5-step swing louver*	●
Room temperature display	●
Schedule management	●
℃/ ℉ display	●
Clock display	●
4 permission levels	●
Indoor unit type/model recognition	●
Energy management	●
Group management	●
Error check function	●
Report display and output	Error history, Operation history, User history, Cycle data history
3D view	●
Language supported	English,Chinese,Arabic,Spanish,Turkish, Portuguese,Korean,Russian,Italian,Polish, French,German,Georgian
Hardware model	
	MK2-B331
Dimensions (HxWxD)(mm)	237×144×87.2
Max. number of gateways per software system	2
Power supply	9~30V DC
Max. number of indoor units per gateway	512
Max. number of refrigerant systems per gateway	64
Unit Series	1Pure V8 system

Device Management and Control

Users can flexibly group and centralize control the VRF devices based on diffferent system or location and scenario. And limit the device functions, such as temperature setting range fan speed, operation mode, swing lock, remote controller lock and wired controller lock.
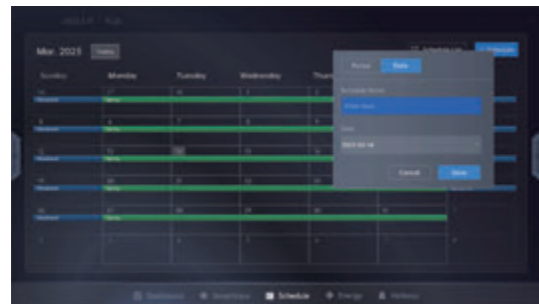

Schedule Function

IMMPRO II can be used to make a detailed schedule for the indoor units. The schedule can be set for the whole year.

Power Distribution

Cooperated with the Midea digital power meter, IMMPRO II can collect ODU power consumption information and use the patented Midea Calculation Method to estimate the electricity consumption of the indoor units and then using the rules set by the user divide the whole power comsumption among building occupants.

User and Permission Management

The administrator can add or reduce user accounts according to the VRF management teams of the buliding, and set corresponding roles for each account. The administrator can flexibly assign permissions of each function of the software to each role

2D/3D view and setting

Users can upload project floor drawings and arrange equipment locations according to the engineering information. The software will be able to display the distribution of system equipment in a 2D or 3D manner

Easy Installation and Debugging

Network Cable/Wi-Fi

Router   Application SW (PC)

IMMPRO II Centralized Control Gateway Supports 1+1

Gateway

XYE
8 ports

Gateway

XYE
8 ports

Network Cable

Max. controllable IDU is 1024

Max. 512 IDUs can be connected

ODU   PM(Optional)   4 way cassette   ductedtype AC   HWALL

ODU   PM(Optional)   4 way cassette   ductedtype AC   HWALL

Max. 512 IDUs can be connected

ODU   PM(Optional)   4 way cassette   ductedtype AC   HWALL

ODU   PM(Optional)   4 way cassette   ducted type AC   HWALL

Network Control System

Features

Cloud Control

	iEasyComfort	iEasyComfort App
Software model	iEasyComfort	iEasyComfort App
Device control	●	●
Device monitor	●	●
Group control	●	●
Schedule management	●	●
Group management	●	●
Error check function	●	●
Operation log	●	●
Clock and Weather display	●	●
Max. number of gateways per software system	Unlimited	Unlimited
Hardware model	GW3-CLOUD	
Dimensions (HxWxD)(mm)	154×124×51.5	
Power supply	12V DC	
Max. number of indoor units per gateway	64	
Max. number of refrigerant systems per gateway	8	
Unit Series	Pure V8 system	

Cloud Service Platform

	Intelligent HVAC Management System
Software model	Intelligent HVAC Management System
Project management	●
Device management	●
ODU and IDU OTA management	●
Event management	●
Permission management	●
Max. number of gateways per software system	Unlimited
Hardware model	GW3-CLOUD
Dimensions (HxWxD)(mm)	154×124×51.5
Power supply	12V DC
Max. number of indoor units per gateway	64
Max. number of refrigerant systems per gateway	8
Unit Series	Pure V8 system

Note:
●: equipped as standard; ×: without this function

Internet — LAN — GW3-CLOUD — X,Y,E — Up to 8 refrigerant systems — P,Q,E or M1 M2 — Up to 64

M-BMS MAX

Project Qty Level A   **57,028**

Current month   **5,325**

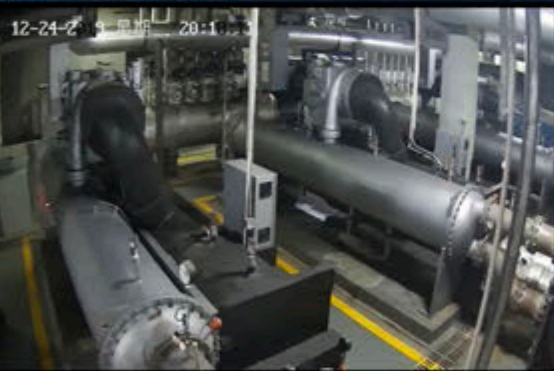|			
VRF	3,204	Air-cooled modular chiller water system	450
Air-cooled heat pump	1,541	Centrifugal/screw chiller water system	130

2019年12月24日 20:16:23   Shunde

	12.25	12.26	12.27	12.28
	Wednesday	Thursday	Friday	Saturday
20				
16-26℃	16-26℃	13-25℃	15-21℃	16-22℃
NWwind 2level	Cloudy	Cloudy	Cloudy	Light rain
Cloudy				

Transient Chain Indexes

Yesterday		Today
21.40	Outdoor temp. ℃	19.37
82.27	RH %	81.56
19.30	WB temp. ℃	17.29
18.28	Dew-point temp. ℃	16.15
13.30	Moisture content g/kg	11.60
2.32	Total power kW	1.26
0.00	Cooling capacity kW	0.00

Real-Time Monitoring Data

12-24-2   20-1

Plant Room Power Data

Chilled pump 18% Power0.23Kw

Chiller 78% Power1.34Kw

Cooling tower 4% Power0.06Kw

Cooling pump 0% Power-0.01Kw

Lighting smart group control system
Light shading control to achieve lighting energy saving

Third-party system integration
•Elevator system
•Security system
•Parking system
•Drainage system

VRF smart group control system
Flexible response to indoor air conditioning space demand

AHU smart group control system
Improve indoor air quality and thermal comfort

Fresh air smart group control system
Adjust fresh air supply volume according to demand

Cooling water smart group control system
Chiller energy efficiency optimization, water supply according to demand

AHU smart group control system
Improve indoor air quality and thermal comfort

Heating system smart group control system
Heat pump energy efficiency optimization, supply heating according to demand

AHU smart group control system
Improve indoor air quality and thermal comfort
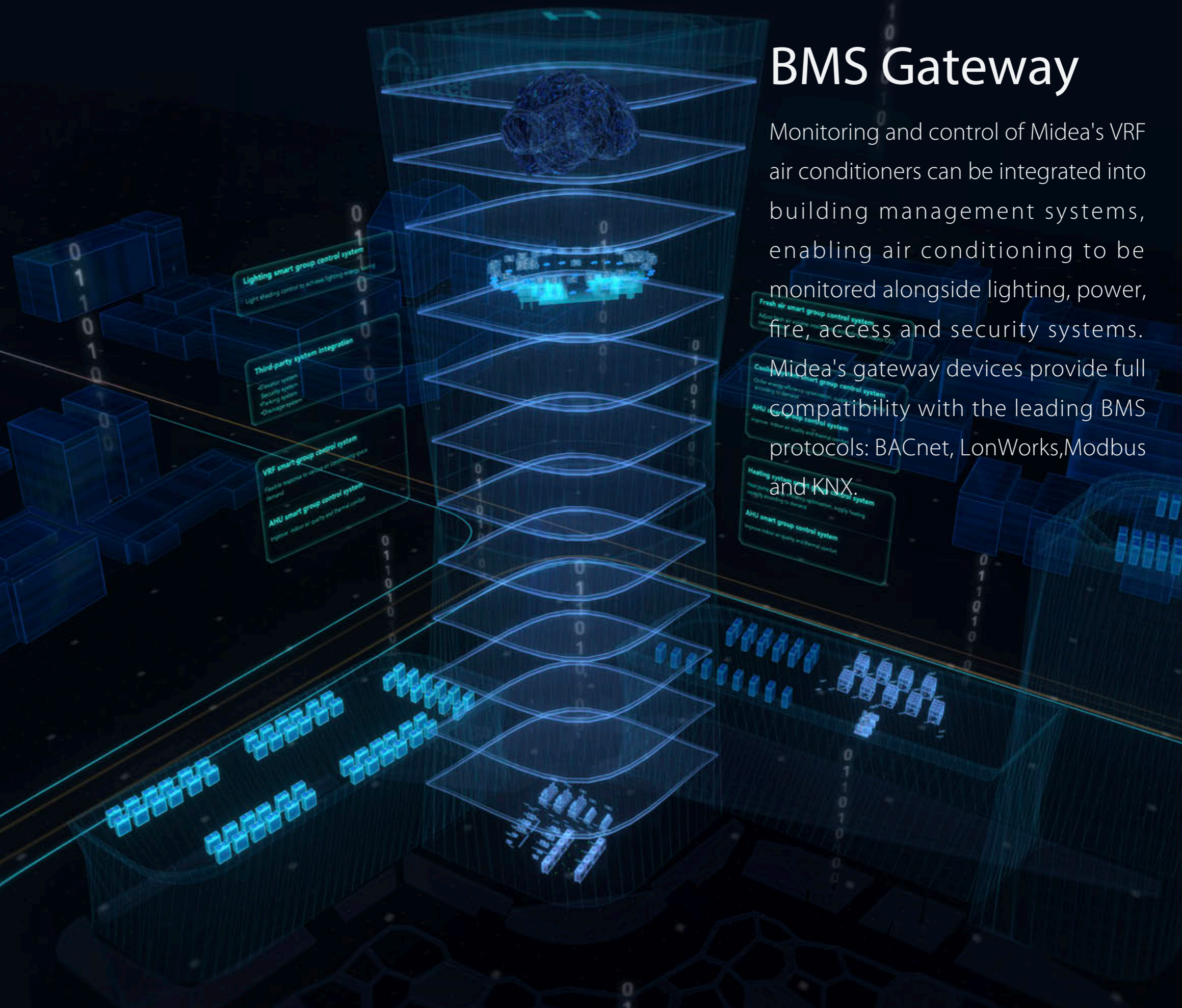
BMS Gateway

Monitoring and control of Midea's VRF air conditioners can be integrated into building management systems, enabling air conditioning to be monitored alongside lighting, power, fire, access and security systems. Midea's gateway devices provide full compatibility with the leading BMS protocols: BACnet, LonWorks, Modbus and KNX.

BACnet Gateway

Port Connections

24V ≅ 0V ⏚
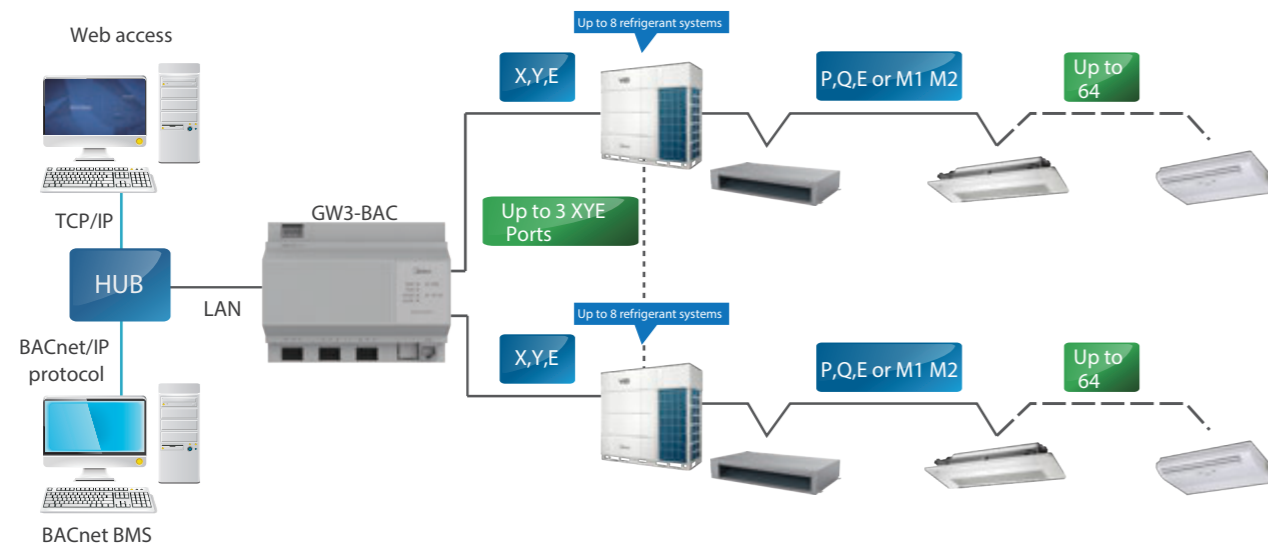
X0 Y0 E | X1 Y1 E | X2 Y2 E | LAN
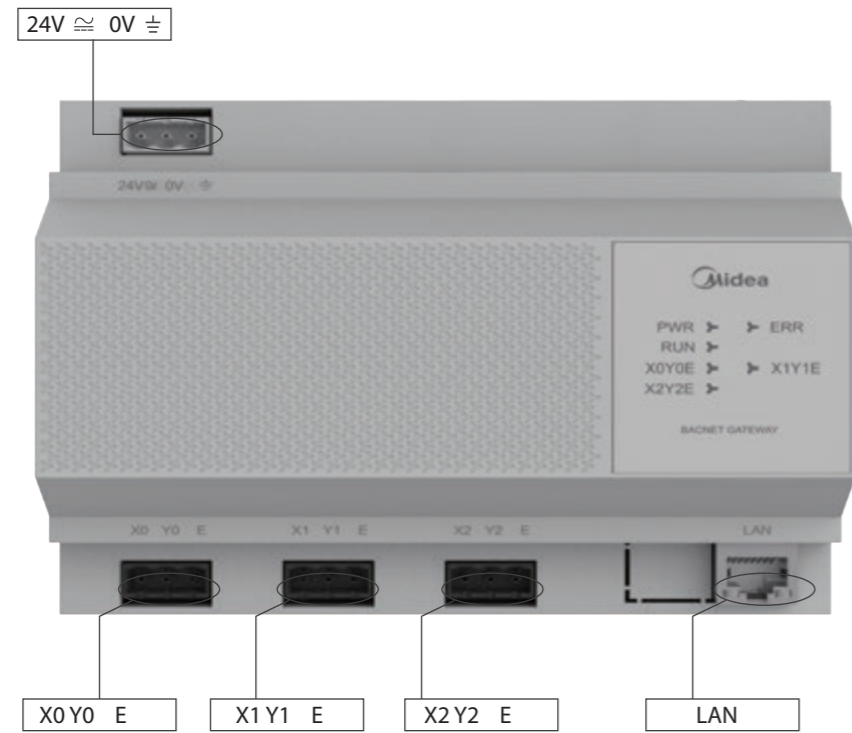
Full Integration

The BACnet Gateway enables seamless connection of Midea VRF systems with building management systems built on the BACnet communication protocol.

Network Flexibility

The gateway can be connected to master outdoor units' XYE ports directly.


Features

Model		GW3-BAC
Max number of indoor units		192
Max. number of refrigerant systems		24
Indoor unit control	On / Off	●
	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Swing	●
	Energy management	●
Indoor unit monitoring	Room temperature display	●
	Running status	●
	Error status	●
	EXV status	●
Outdoor unit control	Emergency Stop	●
Outdoor unit monitoring	Operating mode	●
	Outdoor ambient temperature	●
	Fan speed	●
	Compressor operating frequency	●
	Exhaust Temperature	●
	System pressure	●
	Error status	●
	Error alarms	●
LAN access		●
Dimensions (HxWxD)(mm)		154×124×51.5
Power supply		24V AC/DC
Unit Series		Pure V8 system

Note:
●: equipped as standard; ×: without this function

LonWorks Gateway

Port Connections

24V AC Power Supply

XYE Port

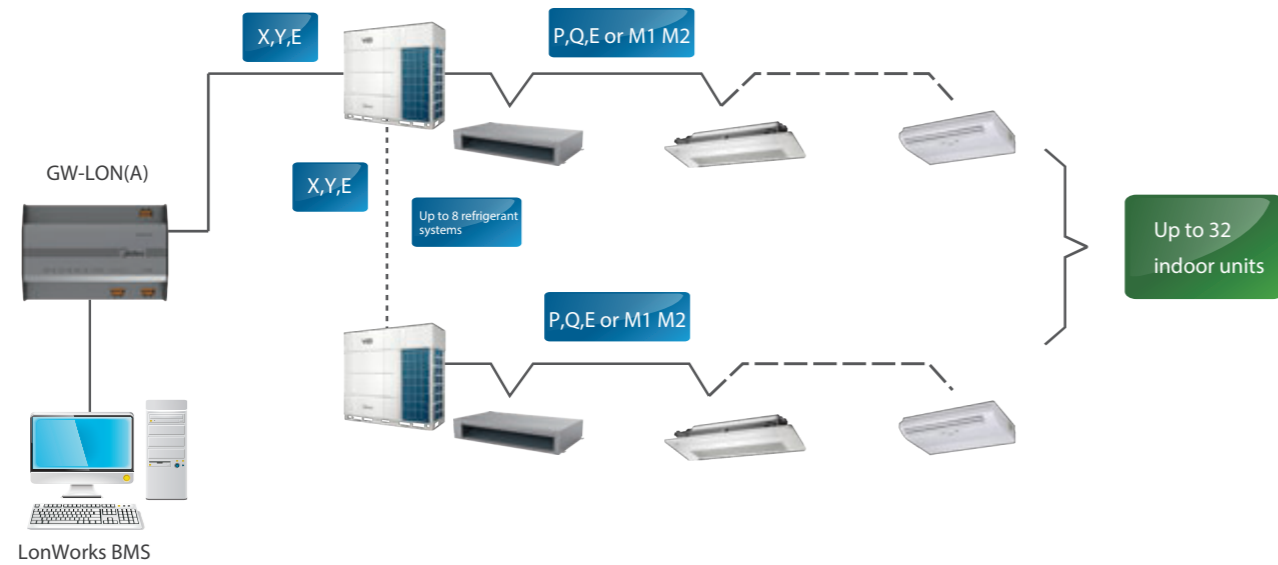**LON+/LON-Connection Ports**
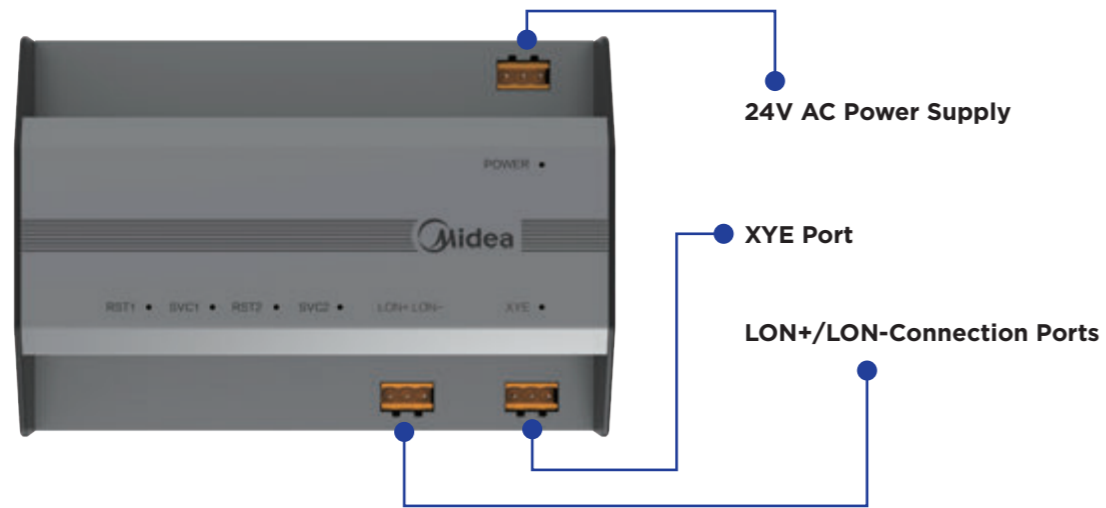
Full Integration

The Lonworks Gateway enables seamless connection of Midea VRF systems with home and building management systems built on the Lonworks communication protocol.

Network Flexibility

The gateway can be connected to master outdoor units' XYE port directly.

GW-LON(A)

X,Y,E

P,Q,E or M1 M2

X,Y,E

Up to 8 refrigerant systems

P,Q,E or M1 M2

Up to 32 indoor units

LonWorks BMS

Features

Model		GW3-LON
Max. number of indoor units		32
Max. number of refrigerant systems		8
Control	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Group shut down	●
	On / Off	●
Indoor unit monitoring	Operating mode	●
	Set temperature	●
	Fan speed	●
	Online status	●
	Operating status	●
	Room temperature	●
	Error status	●
Outdoor unit monitoring	Error status	●
Dimensions (HxWxD)(mm)		116×170×67
Power supply		24V AC
Unit Series		Pure V8 system

Note:
●: equipped as standard

Modbus Gateway
Port Connections
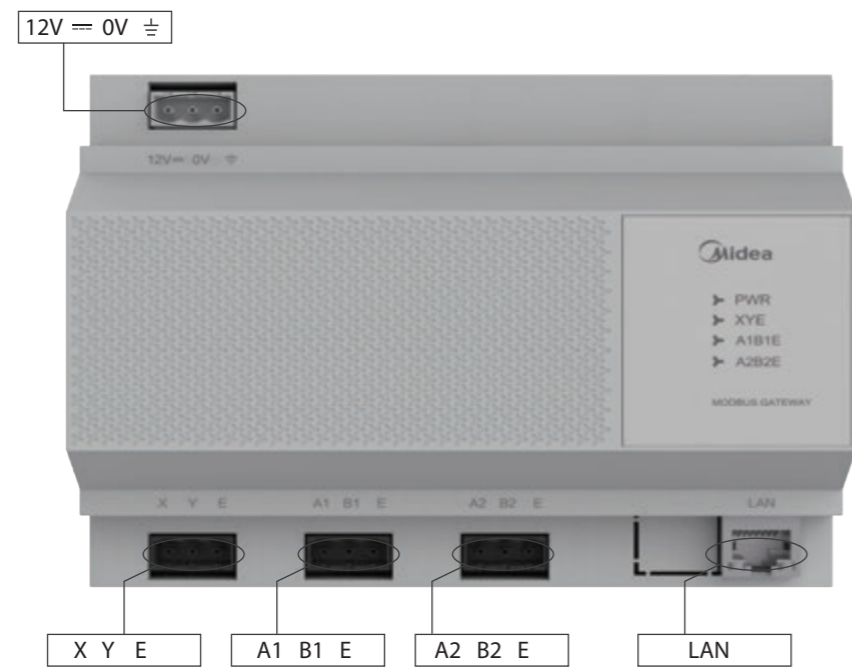
Two types of register addresses

By IDU/ODU address or by IDU/ODU Parameter Type (Continuous Addresses).
For the below parameter type can check by continuous addresses: IDU Operating mode status, IDU Operating fan speed status, IDU Set Temperature, IDU Ambient Temperature, IDU On/Off status, IDU online status, IDU Fault status, ODU Operating status, ODU Fault status, ODU online status and all IDU control register.

Full Integration

The Modbus Gateway enables seamless connection of Midea VRF systems with building management systems built on the Modbus communication protocol.

Network Flexibility

The gateway can be connected to master outdoor units' XYE ports directly.
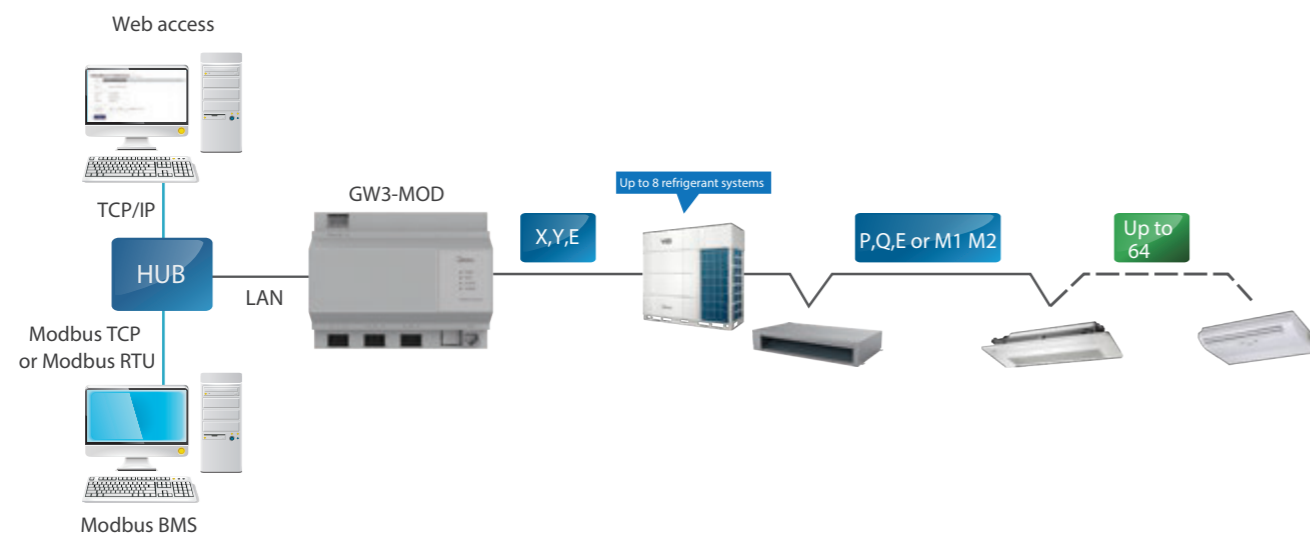
Features

Model		GW3-MOD
Max. number of indoor units		64
Max. number of refrigerant systems		8
Control	On / Off	●
	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Energy management	●
	Group on/off	●
Indoor unit monitoring	Online status	●
	Room temperature	●
	Error status	●
	Operating mode	●
Outdoor unit monitoring	Operating mode	●
	Number of operating IDUs	●
	Outdoor ambient temperature	●
	Error status	●
LAN access		●
Dimensions (HxWxD)(mm)		154×124×51.5
Power supply		12V DC
Unit Series		Pure V8 system

Note:
●: equipped as standard; ×: without this function
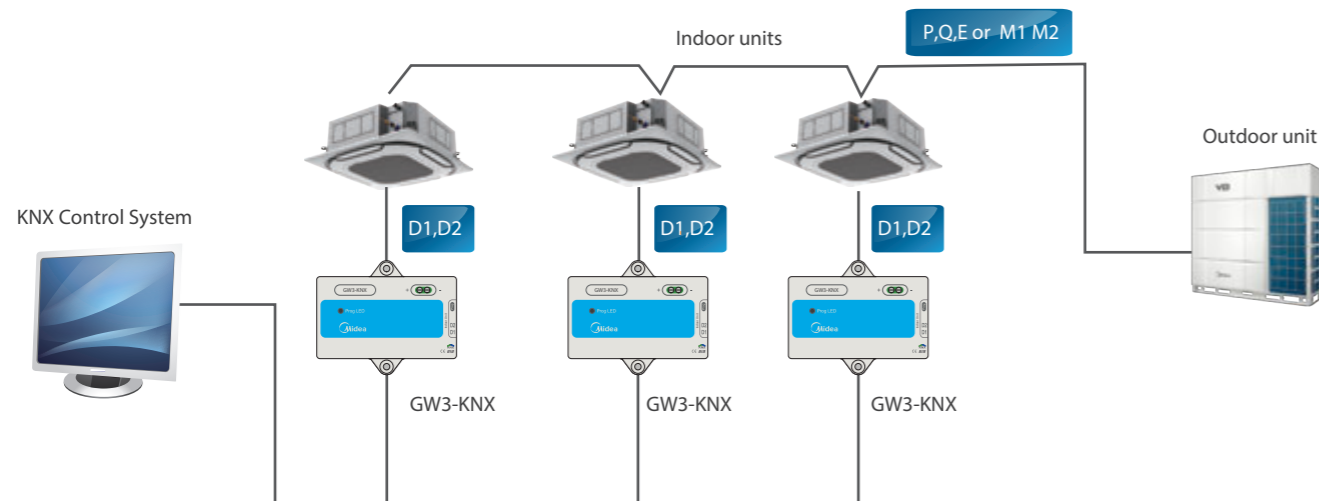
KNX Gateway

Port Connections
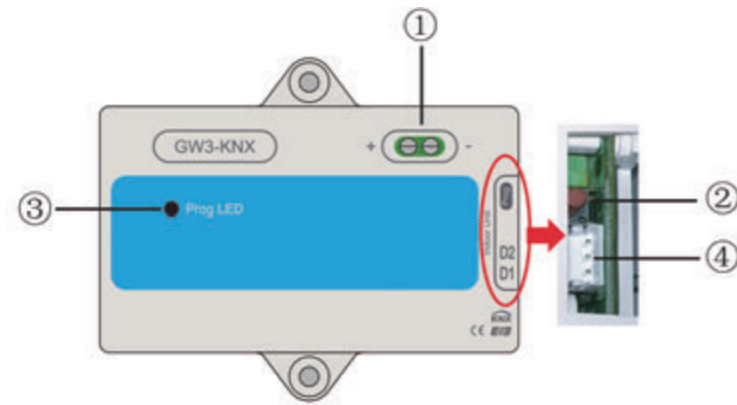
	Features
1	Power Supply DC 29 V
2	KNX Programming Button
3	KNX Programming Status Lamp
4	RS485 Communication Ports

Full Integration

The KNX Gateway enables seamless connection of Midea VRF systems with home and building management systems built on the KNX communication protocol.

Network Flexibility

The gateway can be connected to indoor units' D1D2 port directly.

Features

Model		GW3-KNX
Max. number of indoor units		1
Control	On / Off	●
	Mode selection	●
	Temperature setting	● (1°C steps)
	7-speed fan control	● (3-speed)
	Swing	●
Monitoring	On / Off	●
	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Swing	●
	Room temperature	●
	Error alarm	●
Dimensions (HxWxD)(mm)		85×51×16
Power supply		29VDC (KNX bus supply)
Indoor unit series		3rd generation IDU and V8 IDU

Diagnosis Software

Monitor and Diagnose

Midea's VRF Diagnosis Software tool is used to monitor VRF systems and diagnose system errors.

System settings and operating parameters can be accessed easily and data logs can be reviewed for fault prevention purposes.

Features

Model		DIAGNOSIS(A)
Max. number of indoor units		64
Max. number of refrigerant systems		1
Control	Mode selection	●
	Temperature setting	●
	Fan speed	●
Outdoor unit monitoring	Operating mode	●
	Capacity	●
	Compressor operating frequency	●
	Operating current	●
	Error status	●
	Temperatures	T3, T4(See note 1)
	Valve statuses	SV4, SV5, SV6, ST1 (See note 2)
	EXV position	●
Indoor unit monitoring	Operating mode	●
	Capacity	●
	Fan speed	●
	Address	●
	Temperatures	T1, T2, T2B, TS (See note 3)
	EXV position	●
Error codes		●
Toubleshooting		●
Data logs		●
Diagrams		System schematic, refregetrant flow diagram, parameter chart
Languages supported		English, Chinese
Units Series		Pure V8 system

Note:
● : equipped as standard
1. Heat exchanger temperature, outdoor ambient temperature.
2. Oil return valve, defrosting valve, EXV bypass valve, four-way valve.
3. Indoor ambient temperature, indoor heat exchanger mid-point temperature, indoor heat exchanger outlet temperature, set temperature.
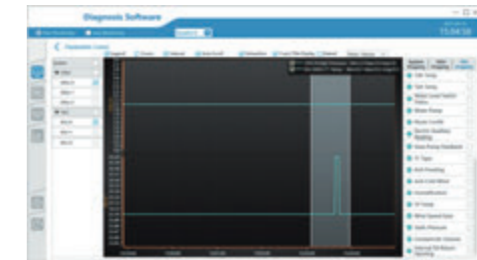
Expert Diagnosis

Midea's VRF Diagnosis Software is specially designed to allow service engineers, to understand the operating status of the system at a glance.
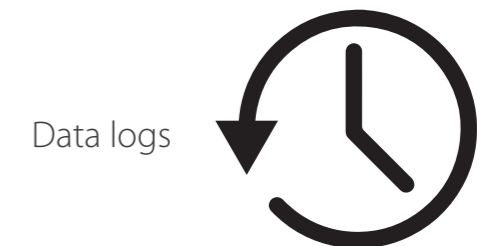
Use-friendly Interface

A stylish and simple interface with rich graphical representations makes diagnosing system issues quick and convenient.

Diagrams

A system schematic, refregetrant flow diagram and parameter chart can be generated to provide a graphical interpretation of the system status.

Parameter Querying and Parametric Curve

Access all the system parameters easily.

Data Logs

Data logs including operating records and error reports are saved by the software which is useful for discovering system issues.

Data logs

Wiring Schematic

H₁H₂E

H₁H₂E

DIAGNOSIS(A)

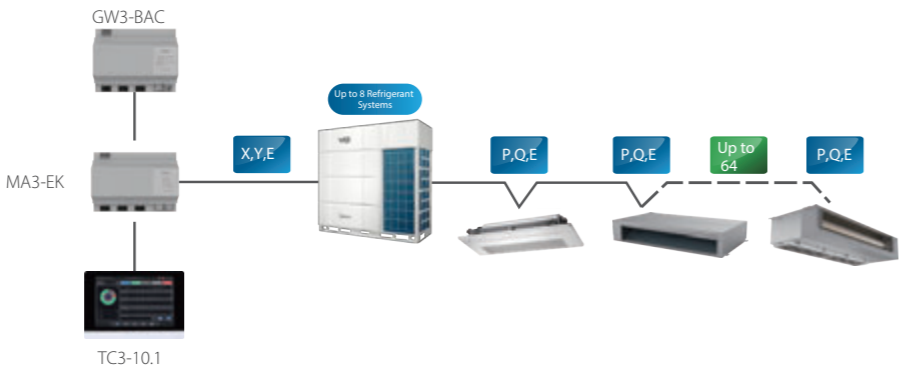X,Y,E

P,Q,E   P,Q,E   Up to 64   P,Q,E
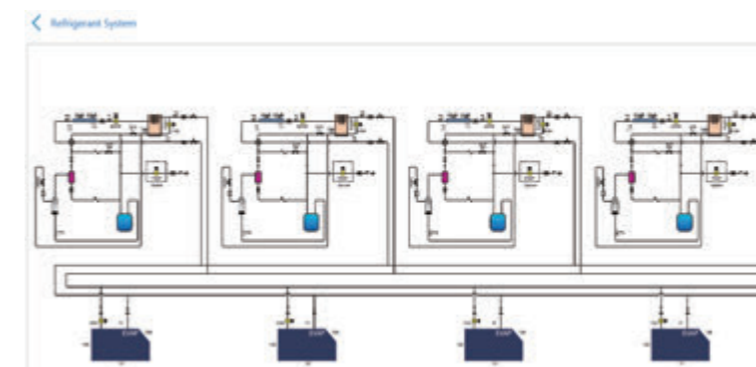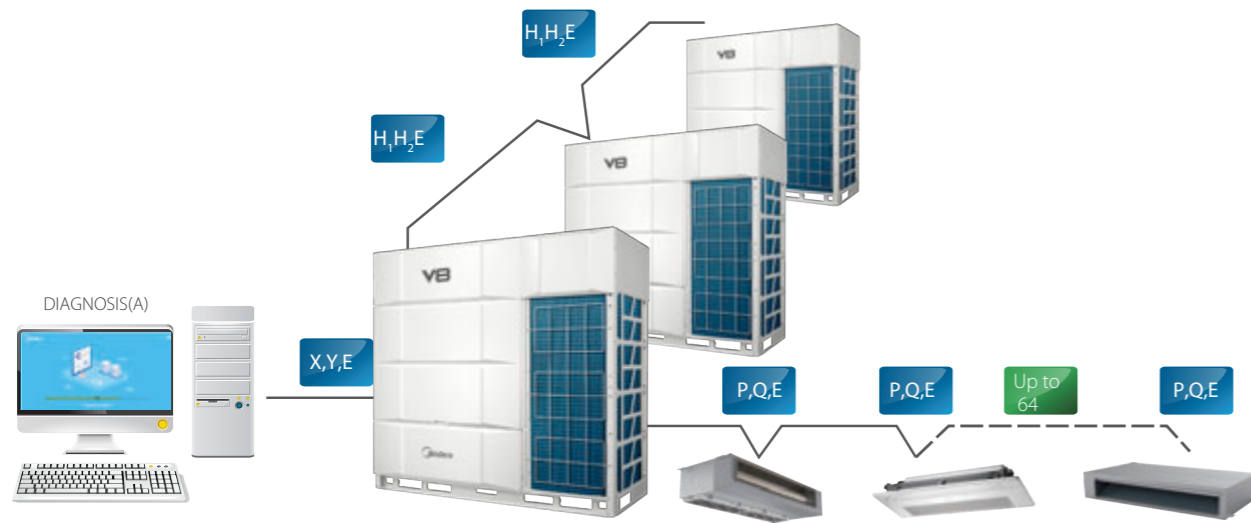
XYE Extension Kit

Simple Design
The MA-EK is used to extend the XYE port of outdoor unit as the 2-way one which can connect to 2 Central Controllers or gateways.
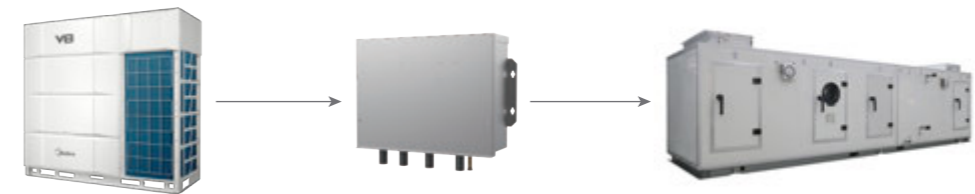
Features

Model	MA3-EK
Max. number of refrigerant systems	8
Wiring flexibility	GW3-BAC MA3-EK X,Y,E Up to 8 Refrigerant Systems P,Q,E P,Q,E Up to 64 P,Q,E TC3-10.1
Dimensions (H×W×D)(mm)	154X124X51.5
Power supply	12V DC
Unit Series	Pure V8 system

VRF DX AHU KIT

High Efficiency
AHU Control Box facilitates raising the EER/COP of the complete AHU system.
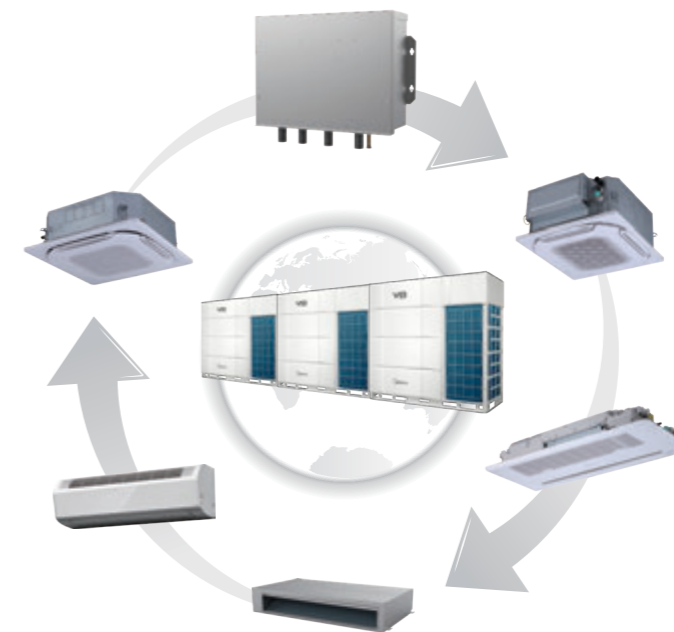

Wide Capacity Range
Four control boxes can be used in parallel, giving an overall capacity range of 0.8HP to 80HP.

AHUKZ-00F: 2.2~9kW
AHUKZ-01F: 9~20kW
AHUKZ-02F: 20~36kW
AHUKZ-03F: 36~56kW

Compatible with VRF Systems
AHU Control Box are compatible with Midea VRF outdoor units and can be used together with all types of Midea VRF indoor units.
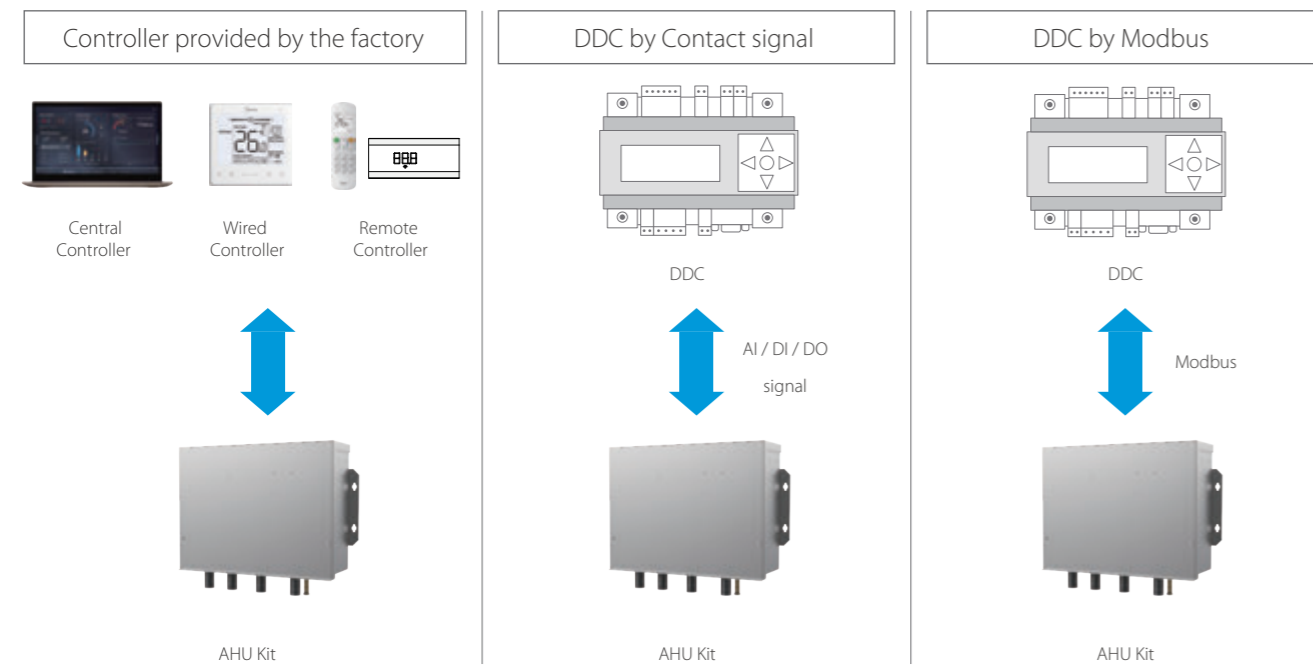
Diverse options for control

AHU Kit can be connected to multiple controllers, and can choose between factory controllers or DDC (third-party control-lers), but only one can be selected. AHU Kit can directly connect to DDC and receive product control information through contact signals or Modbus protocol.

• Midea factory controller supported

Direct wiring between DDC and AHU Kit

- Embedded digital I/O and analog inputs

- Supports Modbus RTU

Note：For details, contact technical personnel.

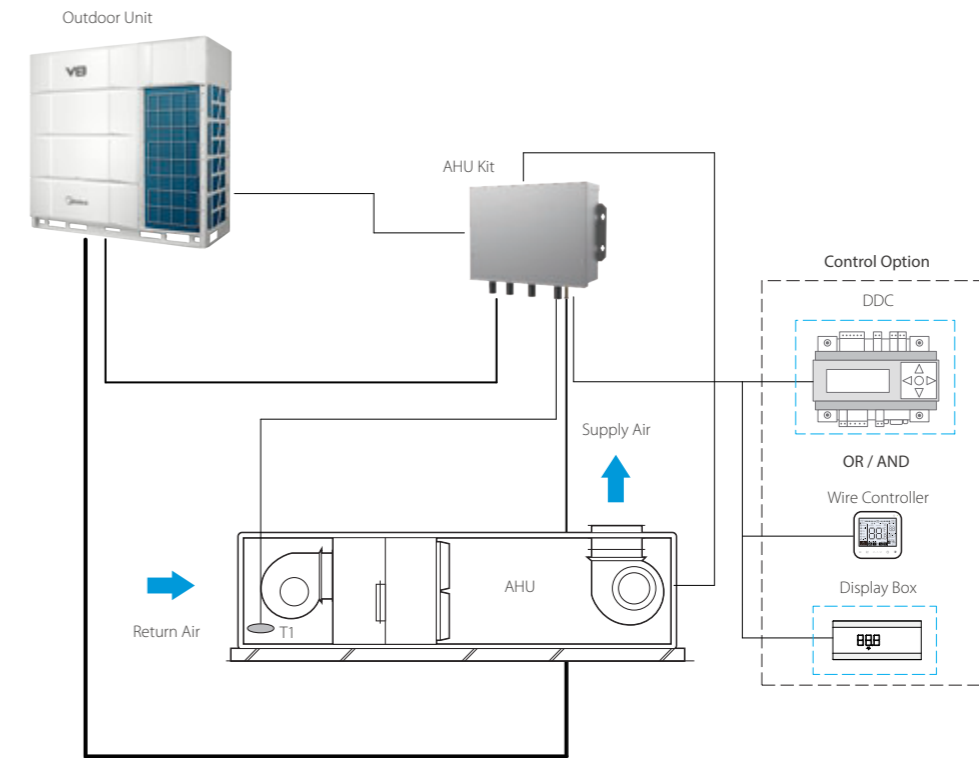| Controller provided by the factory	DDC by Contact signal	DDC by Modbus

Central Controller	Wired Controller	Remote Controller		DDC		DDC

AI / DI / DO signal — Modbus

AHU Kit — AHU Kit — AHU Kit

Matchable controller type

Matching controller model	
Remote controller	12F1+Display box
Wired controller	WDC3-86S
Central controller	IMMRPO II

Specifications

Model name	AHUKZ-00F	AHUKZ-01F	AHUKZ-02F	AHUKZ-03F
Capacity A (kW)	2.2≤A<9	9≤A≤20	20<A≤36	36<A≤56
Power supply	220-240V~50/60Hz			
Liquid pipe (in/out) (mm)	Φ8/Φ8	Φ8/Φ8	Φ12.7/Φ12.7	Φ12.7/Φ12.7
Dimension (WxHxD) (mm)	479x134x384			
Weight (kg)	6.2	6.2	6.4	6.4
Operation range (cooling on coil) (℃)	17-43			
Operation range (heating on coil) (℃)	5-30			
Applicable outdoor units	Heat pump / heat recovery / cooling only			

Application (AHU Kit & Controller Module)

AHU Kit + Return Air Control

Outdoor Unit

AHU Kit

Control Option

DDC

OR / AND

Wire Controller

Display Box

Supply Air

AHU

Return Air

T1

AHU Kit + Supply Air Control

Outdoor Unit

AHU Kit

Control Option

DDC

OR / AND

Wire Controller

Display Box

Supply Air

TA

AHU

Return Air

T0
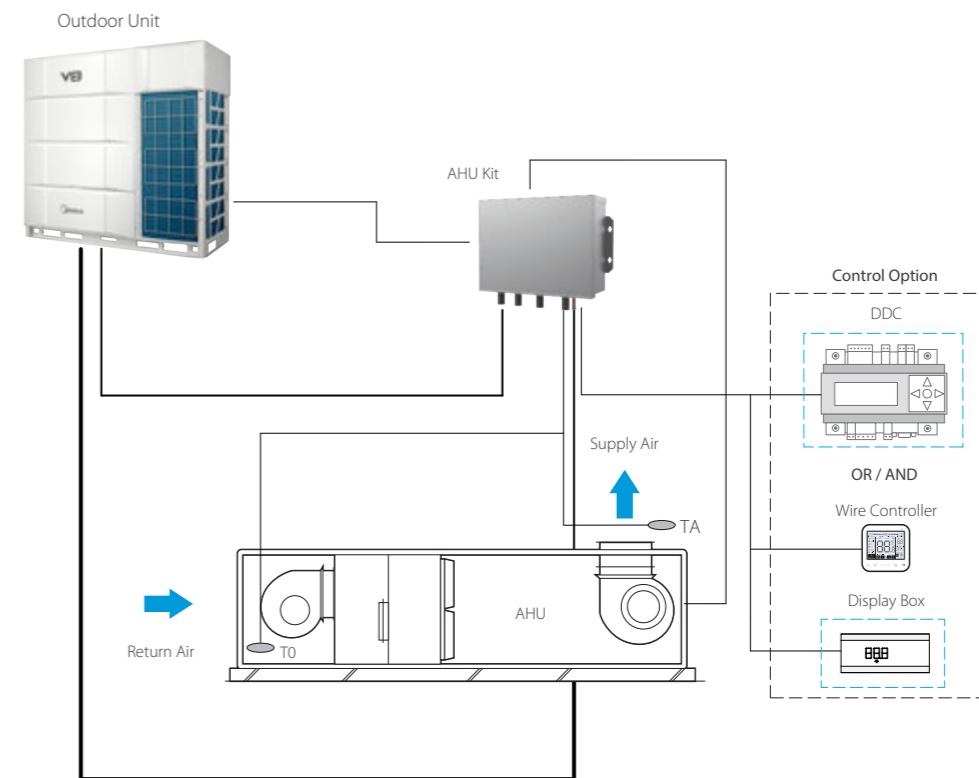
T1: AHU indoor return air temperature sensor
T0: AHU outdoor fresh air temperature sensor
TA: AHU supply air temperature sensor

Note: For detailed installation and use requirements, please read the installation instructions.