DAIKIN

PCNGO1905A



VRV

CONTROL SOLUTION















Easy and simple control of comfort

Various systems suited for the lifestyles of our customers

- Set room to comfortable temperature before returning home
- Automate energy-saving management
- Simplify energy management
- Easily check status while on the go from anywhere
- Confirm air conditioner is off from outside the building
- Remotely control AC along with lighting and electric curtains

INDEX



RESIDENTIAL

P. 3 • For control of air conditioners by smartphone
P. 4 • For control of air conditioners by home automation



SMALL-SIZED COMMERCIAL BUILDINGS

P. 5 • For individual control of air-conditioning by floor or tenant
P. 6 • For easy, centralised control of air-conditioning for the entire building



STORES

P. 7 • For centralised control of equipment, such as lighting, with air-conditioning



HOTELS

P. 8 • For control of guestroom air-conditioning in a villa-styled hotel
P.14 • For control of guestroom air-conditioning in a hotel



MEDIUM-SIZED COMMERCIAL BUILDINGS

P. 9 • For easy, centralised control of an entire building
P.10 • For operation of air-conditioning by smartphone
P.11 • For calculating and issuing of air-conditioning bills
P.12 • For centralised control of other equipment, such as lighting, with air-conditioning



MEDIUM-TO LARGE-SIZED COMMERCIAL BUILDINGS

P.13 • For easy, centralised control of 500 indoor units



LARGE-SIZED COMMERCIAL BUILDINGS

P.15 • For easy, centralised control of 2,000 indoor units



MULTI-SITE MANAGEMENT

P.16 • For integrated control of air-conditioning and other facilities at multiple sites



BMS CONNECTION

P.17 • For controlling ***VRV*** systems by BMS
BACnet® / LonWorks® / Modbus®

RESIDENTIAL

When a *VRV* system is installed at your home

You can easily monitor and control the air conditioner from anywhere with your smartphone.

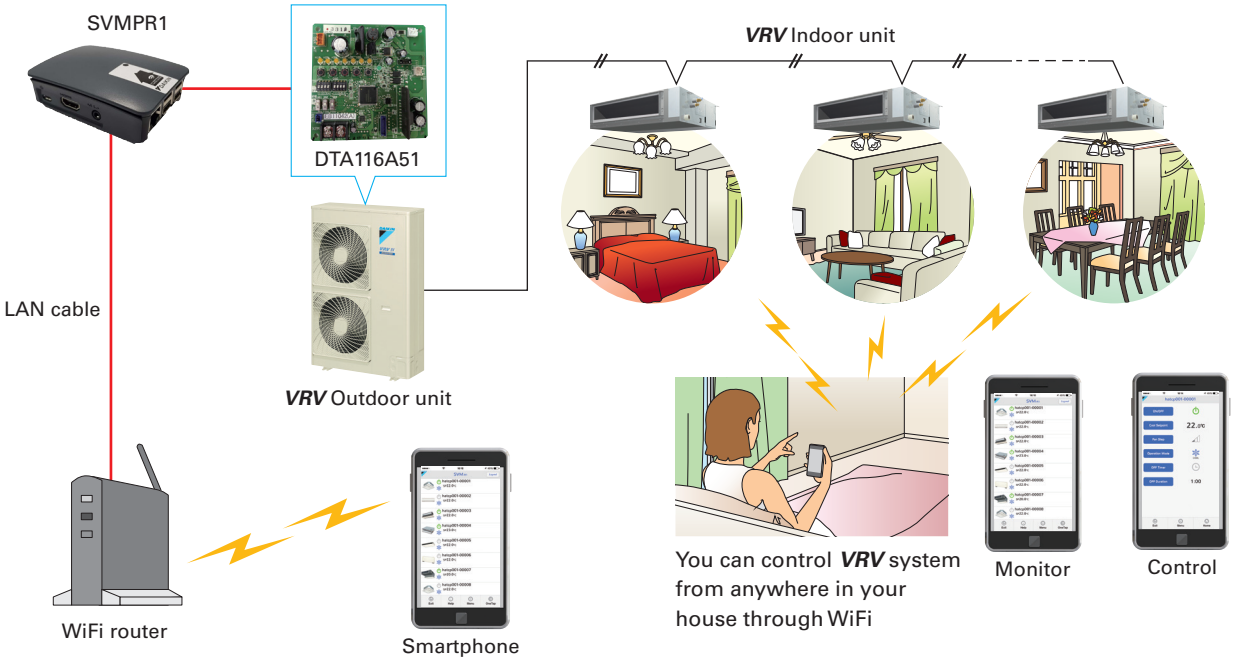
POINT

- It is made possible with simple, additional installation work.
- Malfunctions are reported automatically to the service contractor for prompt repair.

Required equipment
DTA116A51
SVMPR1

*WiFi router and Internet environment are provided by the customer.

Operating conditions
One DTA116A51 can control up to 16 indoor units.



SVMPR1 Functions

Item	Contents
Monitor	Operation status, Set point, Operation mode, Fan step, Flap, Error, Error code, Filter sign
Operation	Start/Stop, Set point, Operation mode, Fan step, Flap, Filter sign clear, All Start/Stop
Automatic Control	OffTimer, OffTimer Duration setup (0:05 – 12:00 5min interval)
System Setup	User registration (only for administrator), Password setting, Network setting (only for administrator)
Display Setup	Indoor unit name setting (only for administrator), Indoor unit icon setting (only for administrator)

When a *VRV* system is installed at a residence using home automation

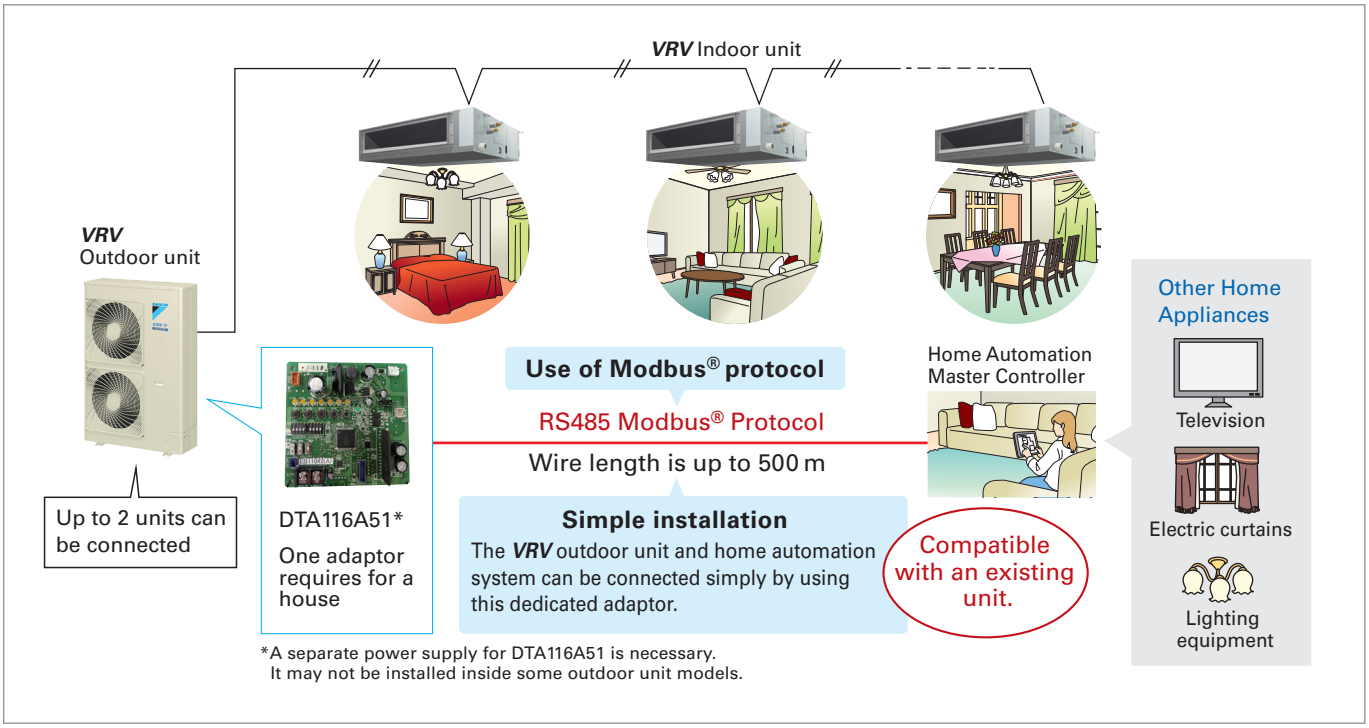
With simple installation work, you can operate and monitor the air conditioner at a residence using home automation.

POINT

- It is made possible with simple, additional installation work.
- The ***VRV*** system can be controlled and monitored by Modbus® Protocol.

Required equipment
DTA116A51

Operating conditions
One DTA116A51 can control up to 16 indoor units.



*A separate power supply for DTA116A51 is necessary.
It may not be installed inside some outdoor unit models.

DTA116A51 Functions

Monitor	
On/Off	On/Off status of indoor units
Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Setpoint	Setpoint of indoor units
Room temperature	Setpoint of indoor units
Fan direction	Swing, Flap direction (depend on indoor unit capability)
Fan volume	L, M, H (depend on indoor unit capability)
Forced off status	Forced off status of indoor units
Error	Malfunction, Warning with Error code
Filter sign	Filter sign of indoor units
Communication status	Communication normal/error of indoor units

Control	
On/Off	On/Off control of indoor units
Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Setpoint	Cooling/Heating setpoint
Fan direction	Swing, Stop, Flap direction (depend on indoor unit capability)
Fan volume	L, M, H (depend on indoor unit capability)
Filter sign reset	Reset filter sign of indoor units

Retrieve system information	
Connected indoor units	DIII-NET address of connected indoor units can be retrieved.
Indoor unit capabilities	Indoor unit capabilities such as operation mode, fan control, setpoint HV can be retrieved.

SMALL-SIZED COMMERCIAL BUILDINGS
(Around 5 to 15 indoor units)

For individual management of air-conditioning by floor or tenant

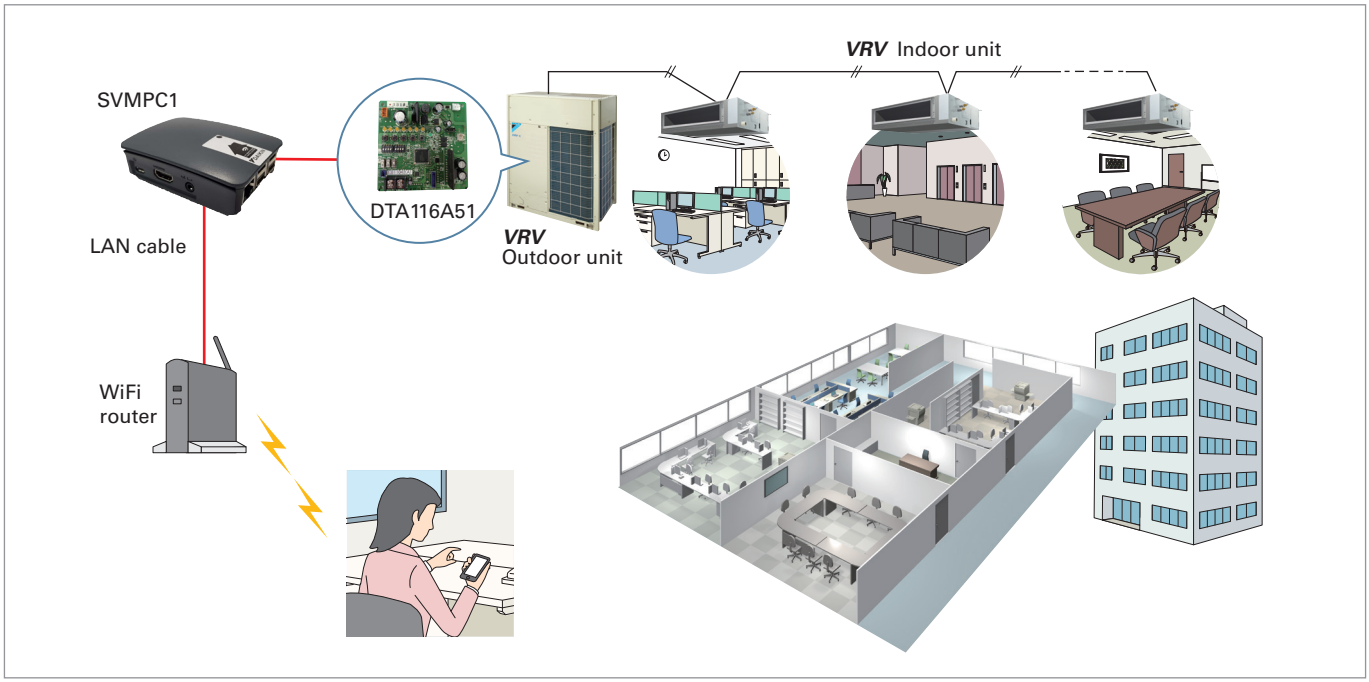
A system can be constructed to optimally manage air-conditioning by building area such as every tenant or every floor.

POINT

- A smartphone or tablet PC can be used to monitor and control air-conditioning from anywhere.
- Malfunctions are reported automatically to the service contractor for prompt repair.
- It is made possible with simple, additional installation work.

Required equipment
DTA116A51
SVMPC1
*WiFi router and Internet environment are provided by the customer.

Operating conditions
One DTA116A51 can control up to 16 indoor units.



SVMPC1 Functions

Category	Function	Description
Basic functions	Multi language support	English, Spanish, Portuguese, Traditional Chinese, Vietnamese, Bahasa (Indonesia), Thai and Japanese
	Monitoring screen	Management point is displayed by icon with status
	Monitoring screen (layout)	Management point is displayed by icon on the floor layout image with status
	Manual operation	Management point can operate manually on/off etc.
Automatic control	Schedule	Automatic operation depend on date and time can be realized
	Interlock	Automatic operation depend on status change of management point is realized
	Scene control	Single button controls multiple operations
	Setback operation	Keeps room at a semi-comfortable temperature when it is not in use
Energy saving	Setpoint range limitation	Block too high/low setpoint is set
	Off timer	Automatically turn off airconditioner after certain time
Data management	Energy graph	Energy consumption of 1 day/1 month/1 year can be displayed in bar chart
	Trend graph	Analog value like temperature, humidity, etc. can be displayed in line chart
	Operation history	All operation, status change and error information are listed with date and time
Remote access	Smartphone access	User can access to SVMPC1 from anywhere by smartphone, tablet and PC
Security	User registration	Only authoized user can access SVMPC1
	Encrypted data communication	All data communication through the internet is encrypted by SSL

SMALL-SIZED COMMERCIAL BUILDINGS
(Around 20 to 30 indoor units)

For easy installation of an air-conditioning management system to a small building

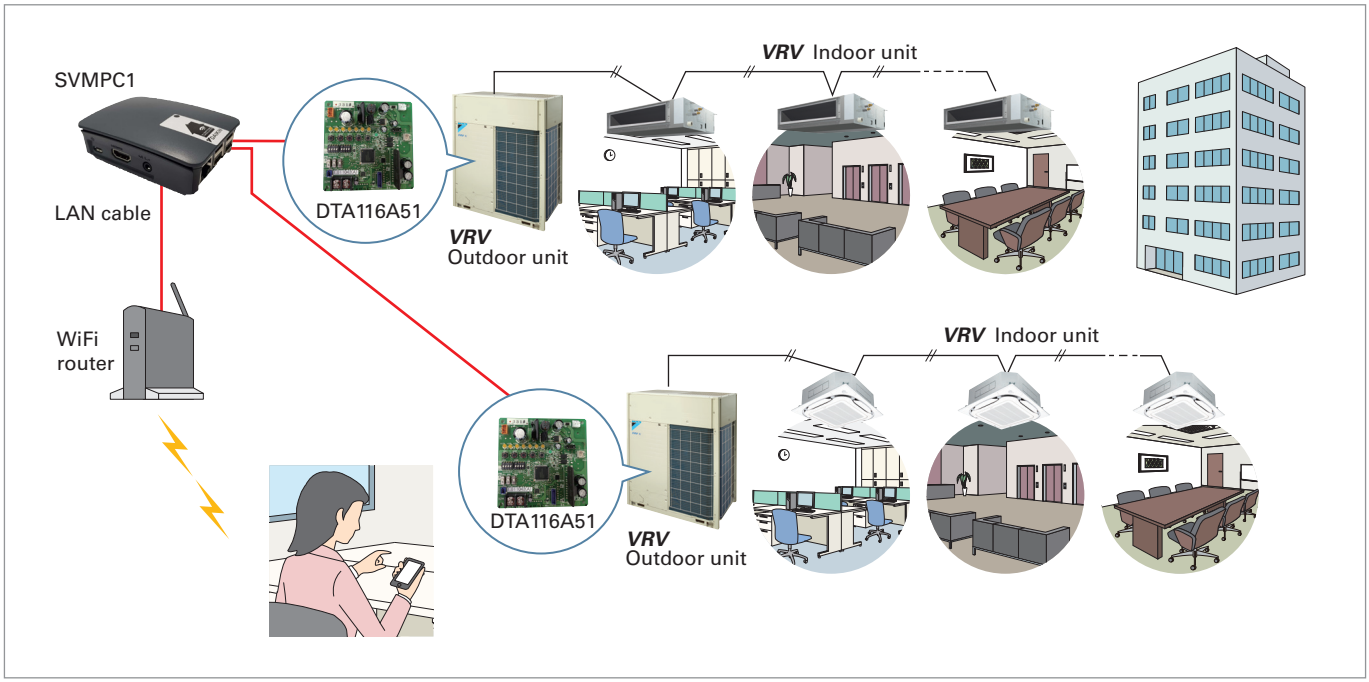
With only simple wiring, sophisticated air-conditioning through centralised control is possible for the entire building. Daily air-conditioning operations can be automated.

POINT

- A smartphone or tablet PC can be used to monitor and control air-conditioning from anywhere.
- Malfunctions are reported automatically to the service contractor for prompt repair.
- It is made possible with simple, additional installation work.

Required equipment
DTA116A51
SVMPC1
*WiFi router and Internet environment are provided by the customer.

Operating conditions
One SVMPC1 can connect up to two DTA116A51 and each DTA116A51 can control up to 16 indoor units.



SVMPC1 Functions

Category	Function	Description
Basic functions	Multi language support	English, Spanish, Portuguese, Traditional Chinese, Vietnamese, Bahasa (Indonesia), Thai and Japanese
	Monitoring screen	Management point is displayed by icon with status
	Monitoring screen (layout)	Management point is displayed by icon on the floor layout image with status
	Manual operation	Management point can operate manually on/off etc.
Automatic control	Schedule	Automatic operation depend on date and time can be realized
	Interlock	Automatic operation depend on status change of management point is realized
	Scene control	Single button controls multiple operations
	Setback operation	Keeps room at a semi-comfortable temperature when it is not in use
Energy saving	Setpoint range limitation	Block too high/low setpoint is set
	Off timer	Automatically turn off airconditioner after certain time
Data management	Energy graph	Energy consumption of 1 day/1 month/1 year can be displayed in bar chart
	Trend graph	Analog value like temperature, humidity, etc. can be displayed in line chart
	Operation history	All operation, status change and error information are listed with date and time
Remote access	Smartphone access	User can access to SVMPC1 from anywhere by smartphone, tablet and PC
Security	User registration	Only authoized user can access SVMPC1
	Encrypted data communication	All data communication through the internet is encrypted by SSL

STORES
(Around 5 to 15 indoor units)

For easy management of store equipment, such as lighting, with air-conditioning

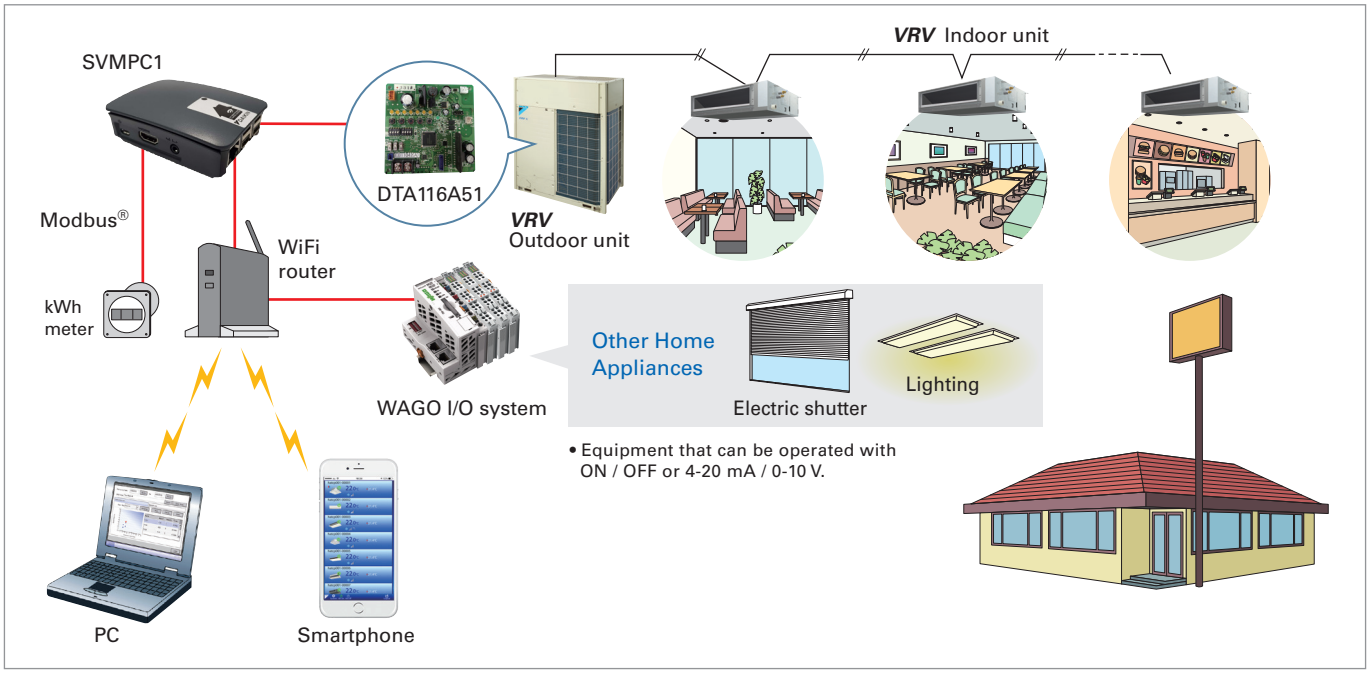
Store equipment devices are centrally managed.
Store energy management is also possible.

POINT

- Store equipment such as ventilation fans and lighting also can be centrally controlled.
- Malfunctions are reported automatically to the service contractor for prompt repair.
- Energy consumption can also be monitored by a watt meter.

Required equipment
DTA116A51
SVMPC1
*WiFi router and Internet environment are provided by the customer.

Operating conditions
One SVMPC1 can connect two DTA116A51, which can control up to 16 indoor units each, and the WAGO I/O system, which controls equipment such as lighting.



SVMPC1 Compatible device list

WAGO models

Type	Model	Remark	Type	Model	Remark
Communication module	750-352	Modbus TCP/IP module	I/O module	750-554	Ao module (2 conacts 4 to 20mA output)
System module	750-601	Power supply module for 750-532		750-555	Ao module (4 contacts 4 to 20mA output)
	750-602	Power supply module for 750-532		750-560	Ao module (2 contacts 0 to 10V output)
	750-600	Terminator module		750-559	Ao module (4 contacts 0 to 10V output)
	750-613	Power supply module		750-461/020-000	NTC20K thermistor module (2 contacts)
I/O module	750-400	Di module (2 contacts)		750-461	Pt100/RTD module (2 contacts)
	750-432	Di module (4 contacts)		750-460	Pt100/RTD module (4 contacts)
	750-430	Di module (8 contacts)		750-461/000-003	Pt1000/RTD module (2 contacts)
	750-513/000-001	Do module (2 contacts)		750-460/000-003	Pt1000/RTD module (4 contacts)
	750-504	Do module (4contacts)		750-461/000-004	Ni100/RTD module (2 contacts)
	750-454	Ai module (2 contacts 4 to 20mA input)		750-461/000-005	Ni1000TK6180/RTD module (2 contacts)
	750-455	Ai module (4 contacts 4 to 20mA input)		750-460/000-005	Ni1000TK6180/RTD module (4 contacts)
	750-479	Ai module (2 contacts -10 to 10V input)	Other	787-712	24V DC Power supply unit
	750-459	Ai module (4 contacts 0 to 10V input)		787-1112	24V DC Compact power supply unit

Manufacturer	Model
Shneider	PM5110 series
	PM5300 series
	PM5500 series
	iEM3100 series
	iEM3200 series
KRON	Multi-K series
Lavato	DMG210

HOTELS
(Guestroom air-conditioning management at villa type hotels)

For controlling air-conditioning of each villa according to use by guests

Automatic air-conditioning control based on check in and out, leaving and entering rooms, and opening and closing windows.

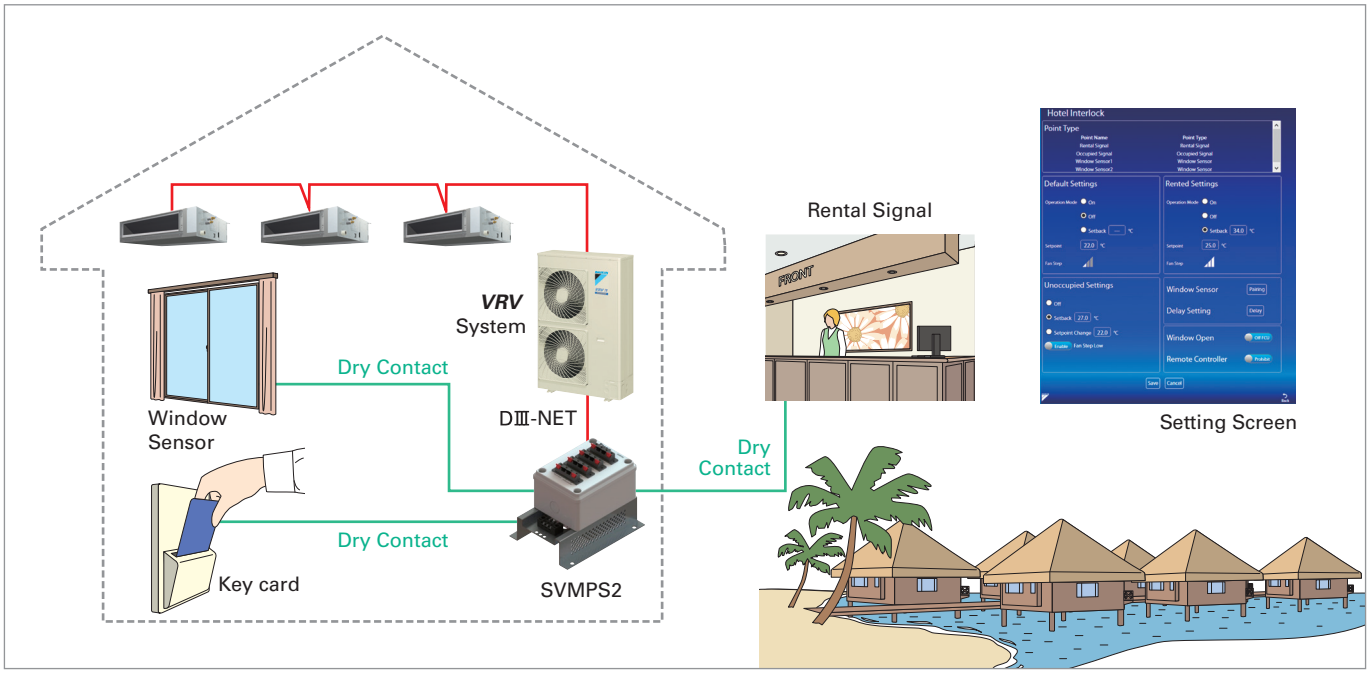
POINT

- It is made possible with simple, additional installation work.
- Simple setting realizes automatic air-conditioning control such as in pre-cooling/heating at check-in, stop/setback/change setpoint when leaving.

Required equipment
SVMPS2

Operating conditions
Control of air-conditioning for each guestroom is possible by sending the following signals to SVMPS2 by dry contact.

- Check in/check out signal
- Occupied/unoccupied signal
- Window open/close signal



SVMPS2 Functions

Type	Item	Note
Default setting	Setpoint	These settings are used when first occupied
	Fan step	
Unrented setting	Stop/Setback	FCU operation can be selected after check out
	R/C operation enable/disable	FCU operation from R/C is allowed or not can be selected after check out
Rented setting (before occupied)	Setpoint	These settings are used after check in before being occupied
	Fan step	
Unoccupied setting	Stop/Setback/Setpoint	Unoccupied operation status can be selected. When setpoint is selected, FCU will continue to operation with specified setpoint
	Fan step	Fan step setting when setback/setpoint is selected
	R/C operation enable/disable	FCU operation from R/C is allowed or not can be selected during unoccupied
Window open setting	Stop/nothing to do	Operation status can be selected during window open
		If stop is not selected, R/C can be used during window open

MEDIUM-SIZED COMMERCIAL BUILDINGS
(Around 30 to 50 indoor units)

For easy installation of an air-conditioning management system to a medium-sized building

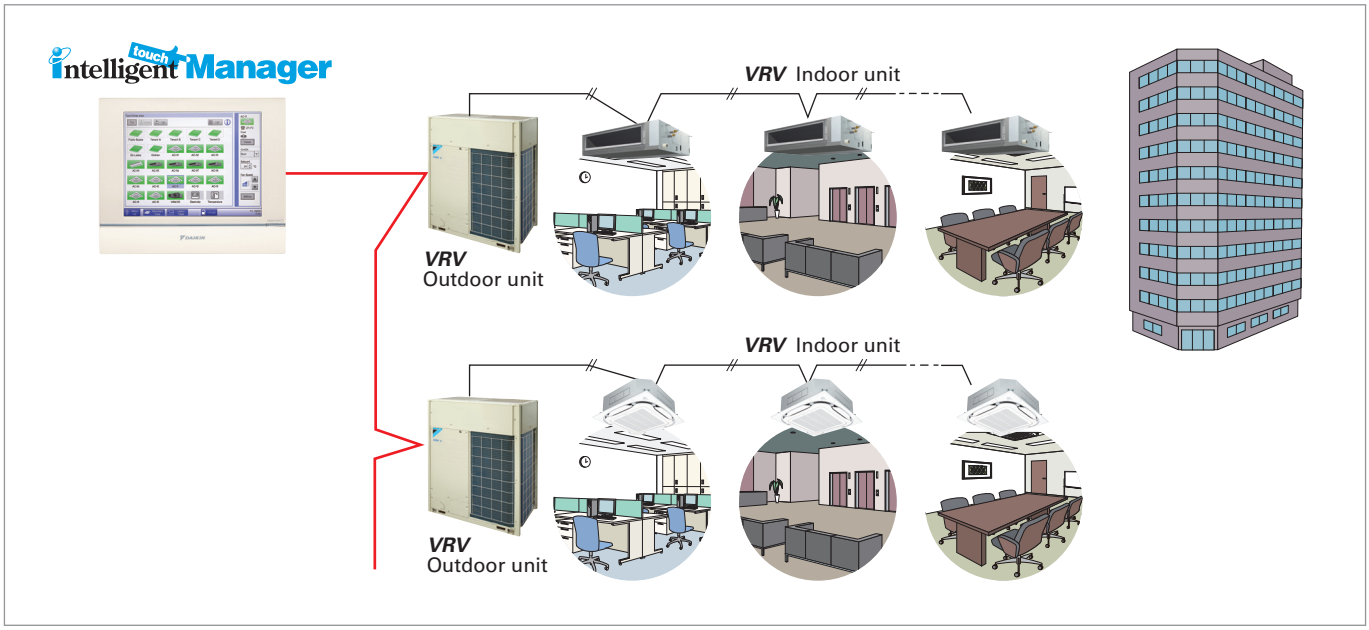
With only simple wiring, sophisticated air-conditioning through centralised control is possible for the entire building. Daily air-conditioning operations can be automated.

POINT

- It is made possible with *intelligent Touch Manager*.
- Malfunctions are reported automatically to the service contractor for prompt repair.

Required equipment
intelligent Touch Manager

Operating conditions
One *intelligent Touch Manager* can control up to 64 ***VRV*** indoor units.



***intelligent Touch Manager* Functions**

Category	Function	Description
Basic functions	Multi language support	English, French German, Italian, Spanish, Portuguese, Dutch, Chinese and Japanese
	Monitoring screen	Management point is displayed by icon with status
	Monitoring screen (list)	Management point is displayed in list style with status
	Monitoring screen (layout)	Management point is displayed by icon on the floor layout image with status
	Manual operation	Management point can operate manually on/off etc.
	Group operation	Group operation support
	R/C operation prohibition	Operation from R/C can prohibit
Automatic control	Schedule	Automatic operation depend on date and time can be realized
	Interlock	Automatic operation depend on status change of management point is realized
	Emergency stop	Forced stop operation by emergency signal
	Automatic cool/heat change over	Indoor unit operation mode is changed automatically by setpoint and room temperature relation
	Setback operation	Keeps room at a semi-comfortable temperature when it is not in use
Energy saving	Setpoint range limitation	Block too high/low setpoint is set
	Timer extension	Automatically turn off airconditioner after certain time
Data management	Power Propotional Distribution (PPD)	***VRV*** outdoor power consmption is devided into each indoor unit based on operation (DCM002A51 is necessary)
	Energy navigator	Energy analysis tool for energy saving (DCM009A51 is necessry)
	Operation history	All operation, status change and error information are listed with date and time
Remote access	Web access	Remote access from Web browser on PC is available in local network
Security	Screen lock	Screen lock is prevent to operate management point from unautholized person
	System menu lock	System menu lock is prevent to modify system setting from unauthoized person

MEDIUM-SIZED COMMERCIAL BUILDINGS
(Around 30 to 50 indoor units)

For air-conditioning operation of a medium-sized building using a smartphone

Smartphone operation for airconditioner can be provided to building users.

POINT

- When a SVMPC1 or SVMPC2 is added to the *intelligent Touch Manager*, air-conditioning operation is possible using a smartphone.
- The administrator can set limits on air conditioner operation for each user.
- Functions and operation range using a smartphone can be restricted for each user.

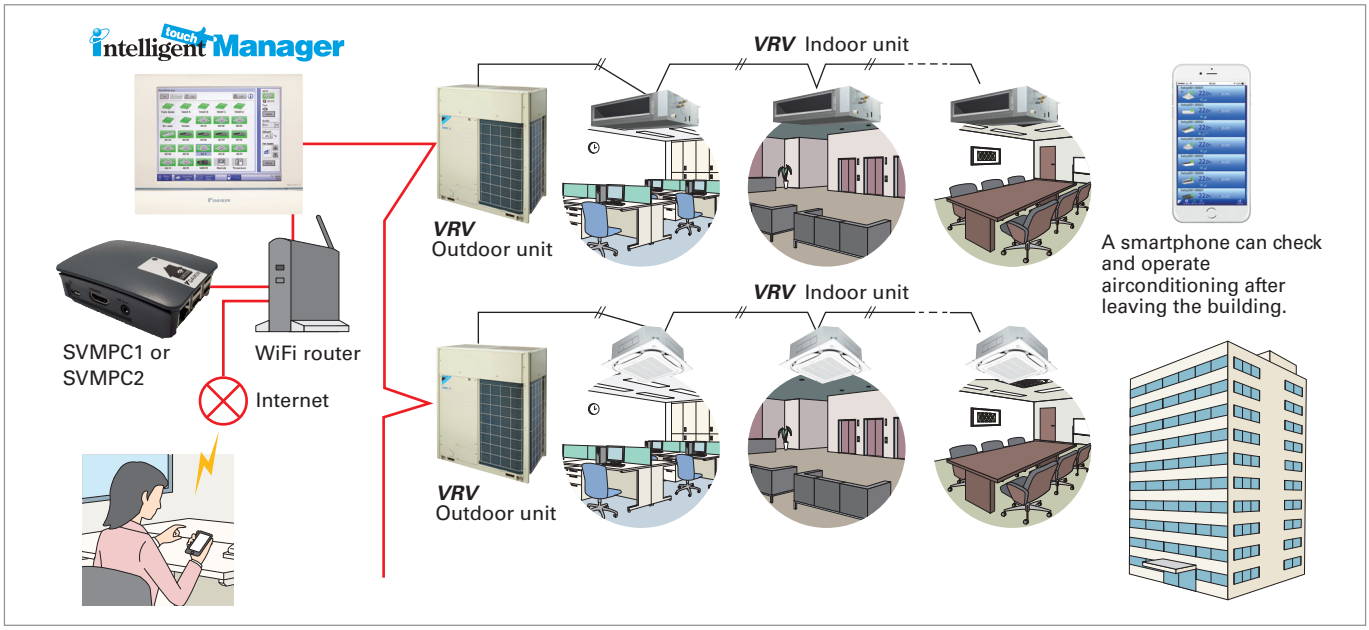
Required equipment

intelligent Touch Manager
DCM007A51
SVMPC1 or SVMPC2

*WiFi router and Internet environment are provided by the customer.

Operating conditions

One *intelligent Touch Manager* can control up to 64 ***VRV*** indoor units.



SVMMPC1/SVMPC2 Smartphone Access Functions

Category	Function	Description
Monitor	Management point status	On/Off, Setpoint, Operation mode, Fan step, Flap, Room temperature, Error, Error code, Filter sign
	Accessible management point limit	Each user can be assigned accessible indoor units to prevent access to other area's indoor units
Operation	Manual operation	On/Off, Setpoint, Operation mode, Fan step, Flap
	Scene control	Single button controls multiple operations
	Setpoint range limitation	Setpoint range can be limited to prevent too high/low setpoint
Operation prohibition	Setpint prohibition	Setpoint operation can be prohibited for specified user
	Opertion mode prohibition	Operation mode change can be prohibited for specified user

MEDIUM-SIZED COMMERCIAL BUILDINGS
(Around 30 to 50 indoor units)

For issuing air-conditioning bills according to use of airconditioner

The PPD function of the *intelligent Touch Manager* can calculate the amount of power consumption for each ***VRV*** indoor unit.

POINT

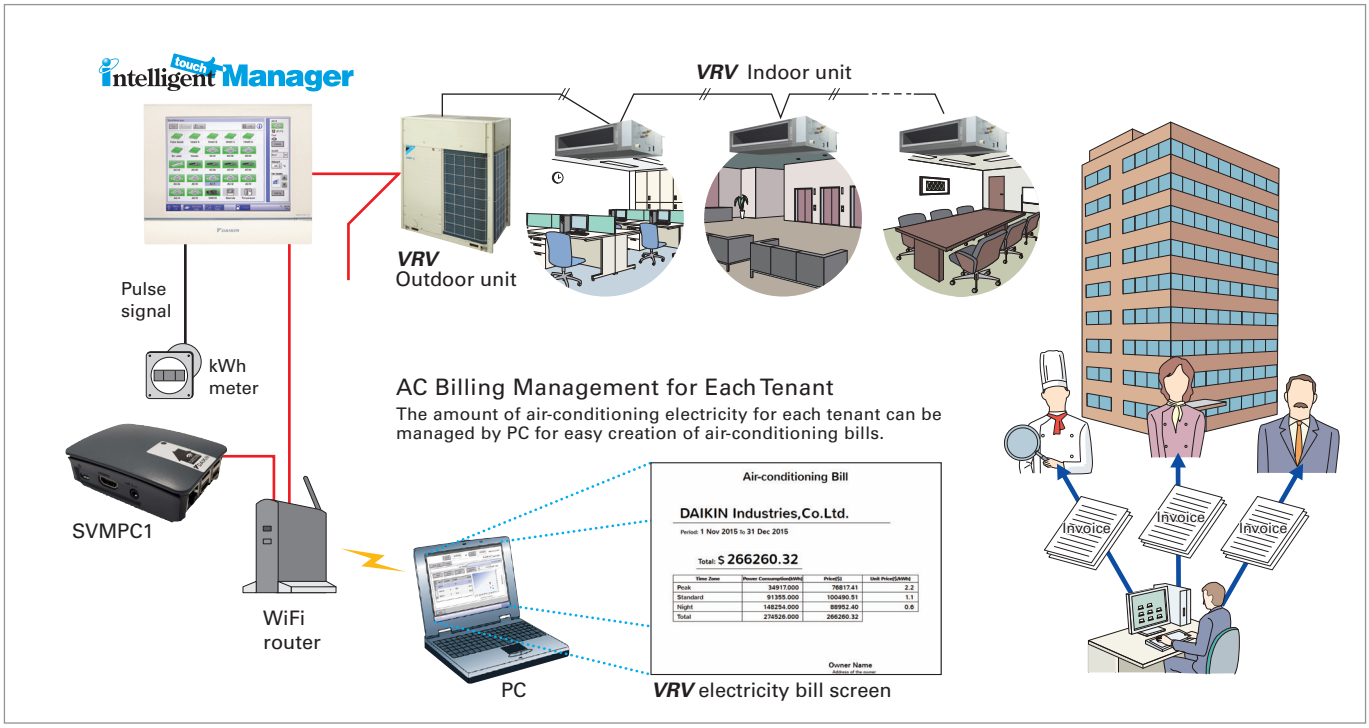
- It is made possible with simple additional work.
- The amount of air-conditioning power consumption can be calculated for each tenant, and a bill can be issued.
- Air-conditioning bills can also be created remotely via the Internet.

Required equipment

intelligent Touch Manager
DCM002A51 (PPD software)
DCM007A51 (SVMPC1 connection software)
SVMPC1
*WiFi router and Internet environment are provided by the customer

Operating conditions

One *intelligent Touch Manager* can control up to 64 ***VRV*** indoor units.



SVMPC1 Billing Functions

Category	Function	Description
Setting	Tenant registration	Tenant is registered with ***VRV*** indoor units
	Electricity price setting	5 time zones electricity price can be set
	Ower information	Owner information (name, contact, etc.) which will be shown in bill can set
Bill	Specify period	Bill period can be specified
	Print out	Bill can be printed out
	File output	Bill data can be output to CSV file

MEDIUM-SIZED COMMERCIAL BUILDINGS
(Around 30 to 50 indoor units)

For centralised control of building equipment, not only air-conditioning

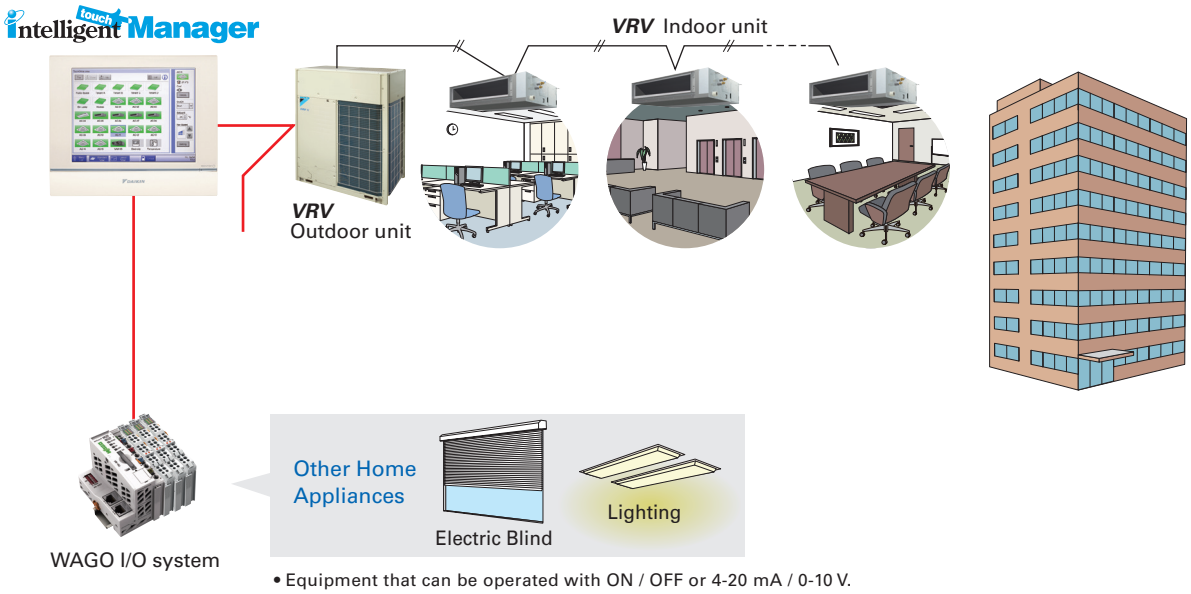
Using a WAGO I/O system, equipment other than air-conditioning can be centrally controlled in the *intelligent Touch Manager*.

POINT

- Building equipment such as in lighting and fans can be managed centrally.
- Automated operation is possible of building equipment such as interlock control of air conditioners and ventilation fans.

Required equipment
intelligent Touch Manager
WAGO I/O system

Operating conditions
One *intelligent Touch Manager* can control up to 64 ***VRV*** indoor units.



• Equipment that can be operated with ON / OFF or 4-20 mA / 0-10 V.

intelligent Touch Manager Compatible WAGO I/O list

Type	Model	Remark	Type	Model	Remark
Communication module	750-315/000-002	RS485 Modbus® communication	I/O module	750-555	Ao module (4 contacts 4 to 20mA output)
	750-315/300-002			750-560	Ao module (2 contacts 0 to 10V output)
System module	750-600	Terminator module		750-559	Ao module (4 contacts 0 to 10V output)
	750-613	Power supply module		750-461/020-000	NTC20K thermistor module (2 contacts)
I/O module	750-400	Di module (2 contacts)		750-461	Pt100/RTD module (2 contacts)
	750-432	Di module (4 contacts)		750-460	Pt100/RTD module (4 contacts)
	750-430	Di module (8 contacts)		750-461/000-003	Pt1000/RTD module (2 contacts)
	750-513/000-001	Do module (2 contacts)		750-460/000-003	Pt1000/RTD module (4 contacts)
	750-504	Do module (4contacts)		750-461/000-004	Ni100/RTD module (2 contacts)
	750-454	Ai module (2 contacts 4 to 20mA input)		750-461/000-005	Ni1000 TK6180/RTD module (2 contacts)
	750-455	Ai module (4 contacts 4 to 20mA input)		750-460/000-005	Ni1000 TK6180/RTD module (4 contacts)
	750-479	Ai module (2 contacts -10 to 10V input)		750-638	Pi module (2 contacts)
	750-459	Ai module (4 contacts 0 to 10V input)	Other	787-712	24V DC Power supply unit
	750-554	Ao module (2 conacts 4 to 20mA output)		750-980	Connector

MEDIUM- TO LARGE-SIZED COMMERCIAL BUILDINGS
(Around 60 to 500 indoor units)

For control of about 500 *VRV* indoor units using one controller

By adding an adaptor, one *intelligent Touch Manager* can control up to 512 ***VRV*** indoor units.

POINT

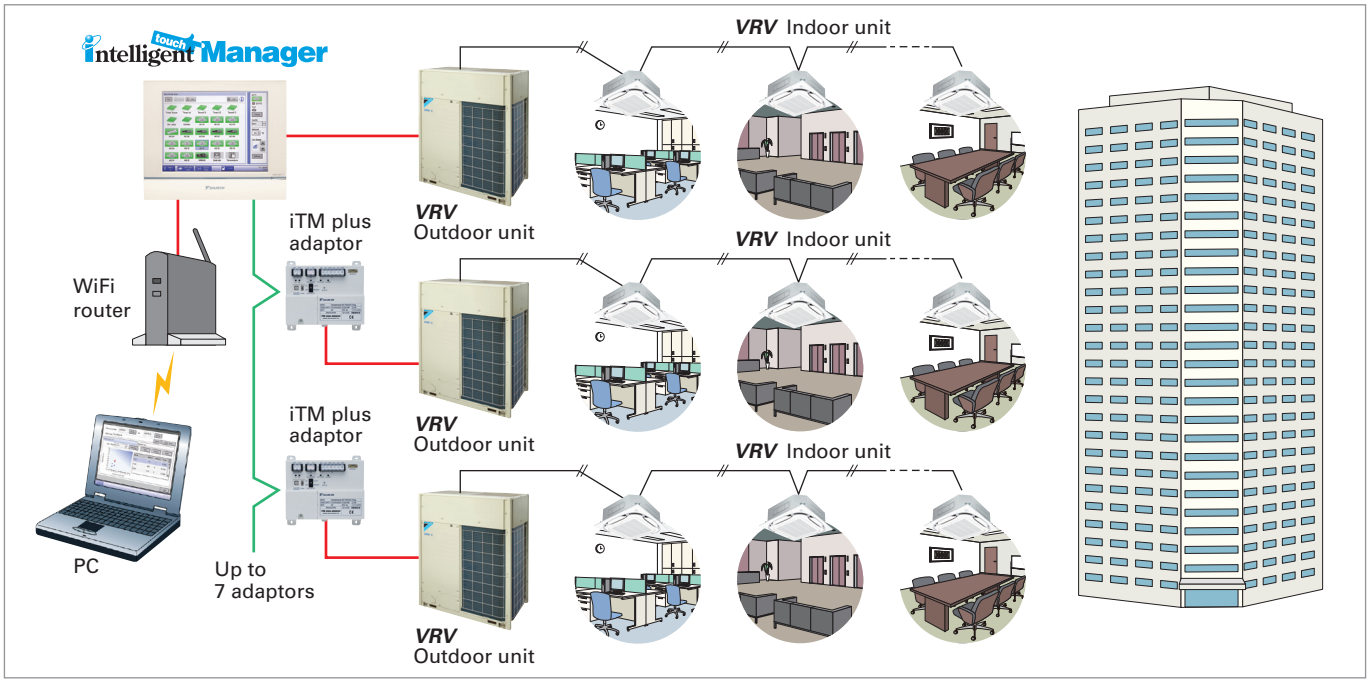
- Hierarchical management and floor layout screens enable numerous indoor units to be easily managed.
- The web access function allows administrative tasks to be performed on large PC screens.

Required equipment

intelligent Touch Manager
iTM plus adaptor (one adaptor is necessary for each time ***VRV*** indoor units exceeding 64 units.)
∗WiFi router is provided by the customer.

Operating conditions

Up to 7 iTM plus adaptors can be connected to one *intelligent Touch Manager* for control of a total of 512 ***VRV*** indoor units.



intelligent Touch Manager Functions

Category	Function	Description
Basic functions	Multi language support	English, French German, Italian, Spanish, Portuguese, Dutch, Chinese and Japanese
	Monitoring screen	Management point is displayed by icon with status
	Monitoring screen (list)	Management point is displayed in list style with status
	Monitoring screen (layout)	Management point is displayed by icon on the floor layout image with status
	Manual operation	Management point can operate manually on/off etc.
	Group operation	Group operation support
	R/C operation prohibition	Operation from R/C can prohibit
Automatic control	Schedule	Automatic operation depend on date and time can be realized
	Interlock	Automatic operation depend on status change of management point is realized
	Emergency stop	Forced stop operation by emergency signal
	Automatic cool/heat change over	Indoor unit operation mode is changed automatically by setpoint and room temperature relation
	Setback operation	Keeps room at a semi-comfortable temperature when it is not in use
Energy saving	Setpoint range limitation	Block too high/low setpoint is set
	Timer extension	Automatically turn off aircon after certain time
Data management	Power Propotional Distribution (PPD)	***VRV*** outdoor power consumption is divided into each indoor unit based on operation (DCM002A51 is necessary)
	Energy navigator	Energy analysis tool for energy saving (DCM009A51 is necessary)
	Operation history	All operation, status change and error information are listed with date and time
Remote access	Web access	Remote access from Web browser on PC is available in local network
Security	Screen lock	Screen lock is prevent to operate management point from unauthorized person
	System menu lock	System menu lock is prevent to modify system setting from unauthorized person

HOTELS
(Managing guestroom air-conditioning in a hotel)

For controlling air-conditioning of each guestroom according to use by guests

Automatic air-conditioning control based on check in and out, leaving and entering rooms, and opening and closing windows.

POINT

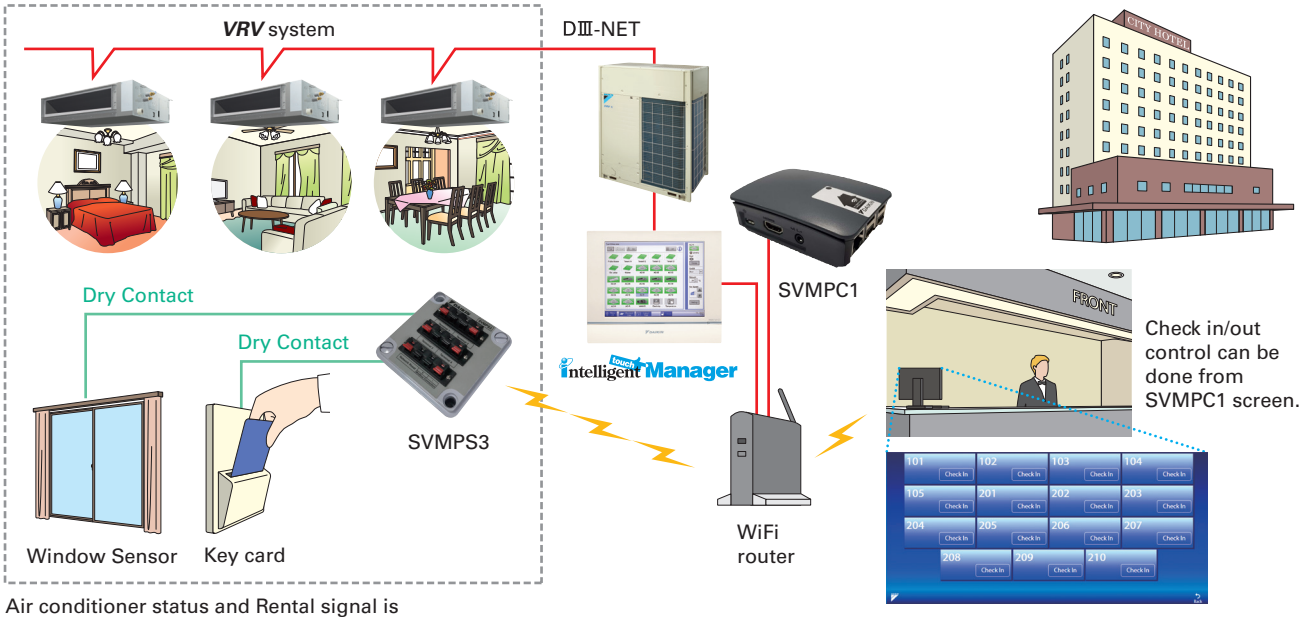
- It is made possible with simple, additional installation work.
- Simple setting realizes automatic air-conditioning control such as in pre-cooling/heating at check-in, stop/setback/change setpoint when leaving.

Required equipment
intelligent Touch Manager
SVMPC1
SVMPS3
∗WiFi router and Internet environment are provided by the customer.

Operating conditions
Control of air-conditioning for each guestroom is possible by sending the following signals to SVMPS3 by dry contact.

[•Occupied/unoccupied signal.
•Window open/close signal.]

The check in/out signal is sent from SVMPC1. SVMPC1 and SVMPS3 connect to LAN and communicate.



SVMPS3 Functions

Type	Item	Note
Default setting	Setpoint	This settings are used when the first occupied
	Fan step	
Unrented setting	Stop/Setback	FCU operation can be selected after check out
	R/C operation enable/disable	FCU operation from R/C is allowed or not can be selected after check out
Rented setting (before occupied)	Setpoint	This settings are used when after check in before occupied
	Fan step	
Unoccupied setting	Stop/Setback/Setpoint	Unoccupied operation status can be selected. When setpoint is selected, FCU will continue to operation with specified setpoint
	Fan step	Fan step setting when setback/setpoint is selected
	R/C operation enable/disable	FCU operation from R/C is allowed or not can be selected during unoccupied
Window open setting	Stop/nothing to do	Operation status can be selected during window open
		If stop is not selected, R/C can be used during window open

LARGE-SIZED COMMERCIAL BUILDINGS
(Around 500 to 2,000 indoor units)

For centralised control of 2,000 *VRV* indoor units

SVMPC1 enables integrated control of ***VRV*** indoor units connected to multiple *intelligent Touch Manager* units.

POINT

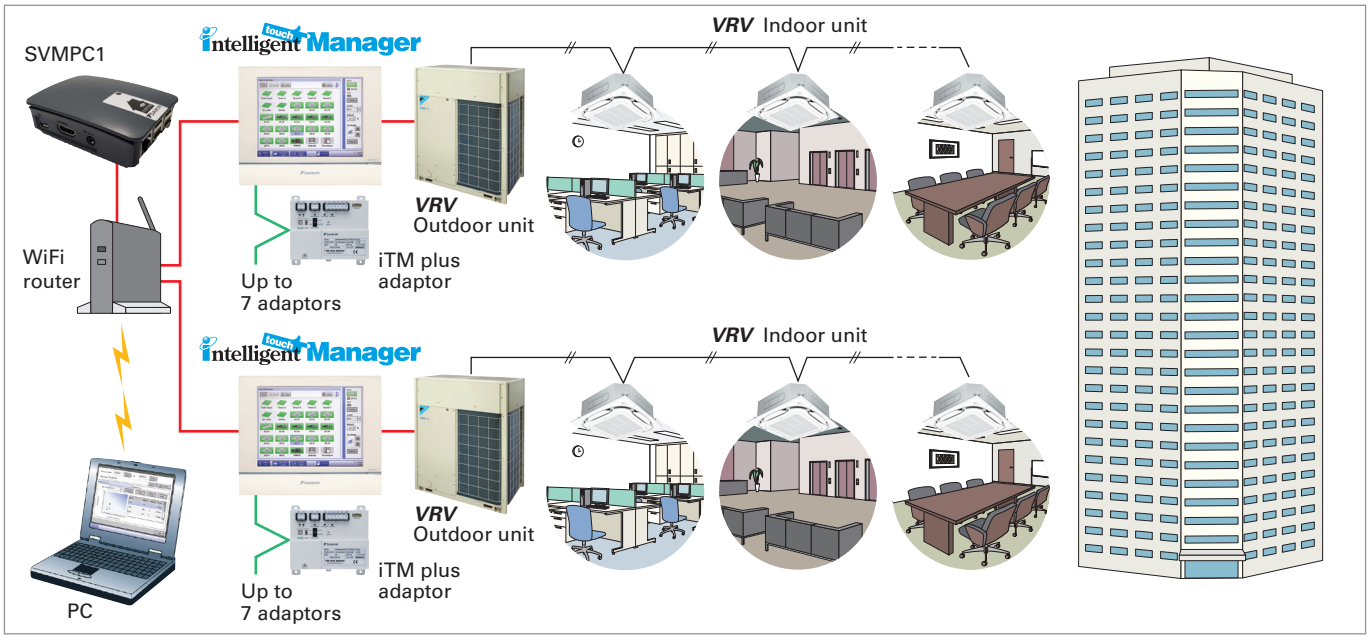
- Managing by use of a large screen PC is possible.
- Group screens created based on floors / tenants and floor layout screens realize easy management for many indoor units.
- Malfunctions are reported automatically to the service contractor for prompt repair.

Required equipment

intelligent Touch Manager
iTM plus adaptor (One adaptor is necessary for each time ***VRV*** indoor units exceeding 64 units.)
DCM007A51
SVMPC1
*WiFi router and Internet environment are provided by the customer.

Operating conditions

Up to 5 *intelligent Touch Manager* units can connect to one SVMPC1.
Up to 7 iTM plus adaptors can be connected to one *intelligent Touch Manager* for control of a total of 512 ***VRV*** indoor units.



SVMPC1 + *intelligent Touch Manager* system Functions

Category	Function	Description
Basic functions	Multi language support	English, Spanish, Portuguese, Traditional Chinese, Vietnamese, Bahasa (Indonesia), Thai and Japanese
	Monitoring screen	Management point is displayed by icon with status
	Monitoring screen (layout)	Management point is displayed by icon on the floor layout image with status
	Manual operation	Management point can operate manually on/off etc.
	R/C operation prohibition	Operation from R/C can prohibit (set by *intelligent Touch Manager*)
Automatic control	Schedule	Automatic operation depend on date and time can be realized
	Interlock	Automatic operation depend on status change of management point is realized
	Scene control	Single button controls multiple operations
	Setback operation	Keeps room at a semi-comfortable temperature when it is not in use
	Emergency stop	Forced stop operation by emergency signal (controlled by *intelligent Touch Manager*)
	Automatic cool/heat change over	Indoor unit operation mode is changed automatically by setpoint and room temperature relation (controlled by intelligent Touch Manager)
Energy saving	Setpoint range limitation	Block too high/low setpoint is set
	Off timer	Automatically turn off aircon after certain time
Data management	Energy graph	Energy consumption of 1 day/1 month/1 year can be displayed in bar chart
	Trend graph	Analog value like temperature, humidity, etc. can be displayed in line chart
	PPD tenant billing	Air conditioning bill for tenants can be made based on PPD data of *intelligent Touch Manager*
	Operation history	All operation, status change and error information are listed with date and time
Remote access	Smartphone access	User can access to SVMPC1 from anywhere by smartphone, tablet and PC
Security	User registration	Only authorized user can access SVMPC1
	Encrypted data communication	All data communication through the internet is encrypted by SSL

MULTI-SITE MANAGEMENT
(National account, School)

For remote, centralised control of air-conditioning and other equipment installed at multiple buildings

Centralised control via the Internet is possible for multiple buildings at different locations.

POINT

- Various equipment, including air-conditioning, can be operated and monitored remotely from headquarters.
- Energy can also be monitored at each facility by connecting a watt meter.
- It is made possible with simple, additional installation work.
- Malfunctions are reported automatically to the service contractor for prompt repair.

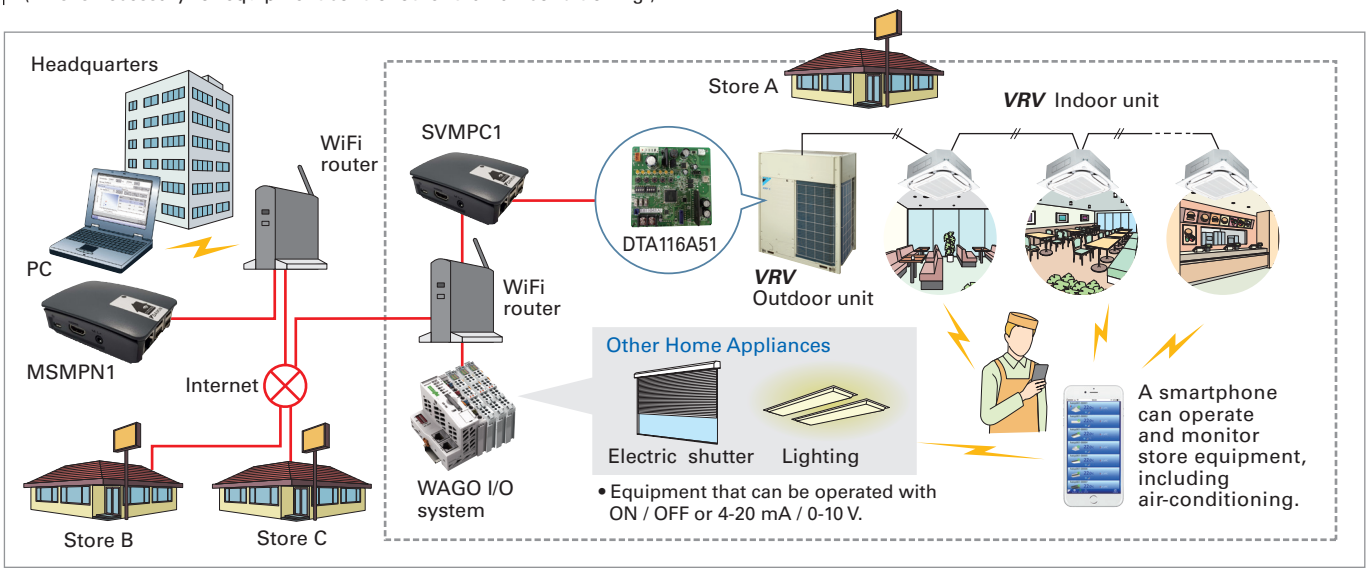
Required equipment

At Store:
DTA116A51
(Connection of up to 16 indoor units is possible.)
SVMPC1
WAGO I/O system
(This is necessary for equipment control other than air-conditioning.)

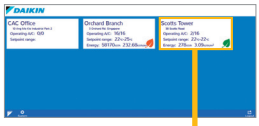
At Headquarters:
MSMPN1
*WiFi router and Internet environment are provided by the customer.

Operating conditions

One MSMPN1 enables centralised control of up to 200 buildings at once.



All Sites monitoring screen



Up to 200 buildings can be registered

•Site monitoring



1. Site name
2. Location of the site
3. Air conditioner operation information
   Operation units / All units
4. Setpoint range of Air conditioner
5. Energy consumption level icon Green is eco, Orange is consume
6. Energy consumption

Site access screen



•Site monitoring



1. Unit name
2. Operation/Stop
3. Set temperature
4. Unit type
5. Room temperature
6. Fan step
7. Operation mode

MSMPN1 Functions

Category	Function	Description
Basic functions	Multi language support	English, Spanish, Portuguese, Traditional Chinese, Vietnamese, Bahasa (Indonesia), Thai and Japanese
	Monitoring screen	All site information is displayed in one screen
	Site access	Access to site SVMPC1 on the monitoring screen and can use all functions of SVMPC1
Remote access	Tablet access	User can access MSMPN1 from anywhere by tablet and PC
Security	User registration	Only authorized user can access MSMPN1
	Site access limitation	Accessible sites can be limited for each user
	Encrypted data communication	All data communication through the internet is encrypted by SSL

For controlling *VRV* systems by BMS

VRV system can easily connect to BMS that are compatible with BACnet® Protocol.

POINT

- BTL certification (DMS502B51)
- Excellent scalability

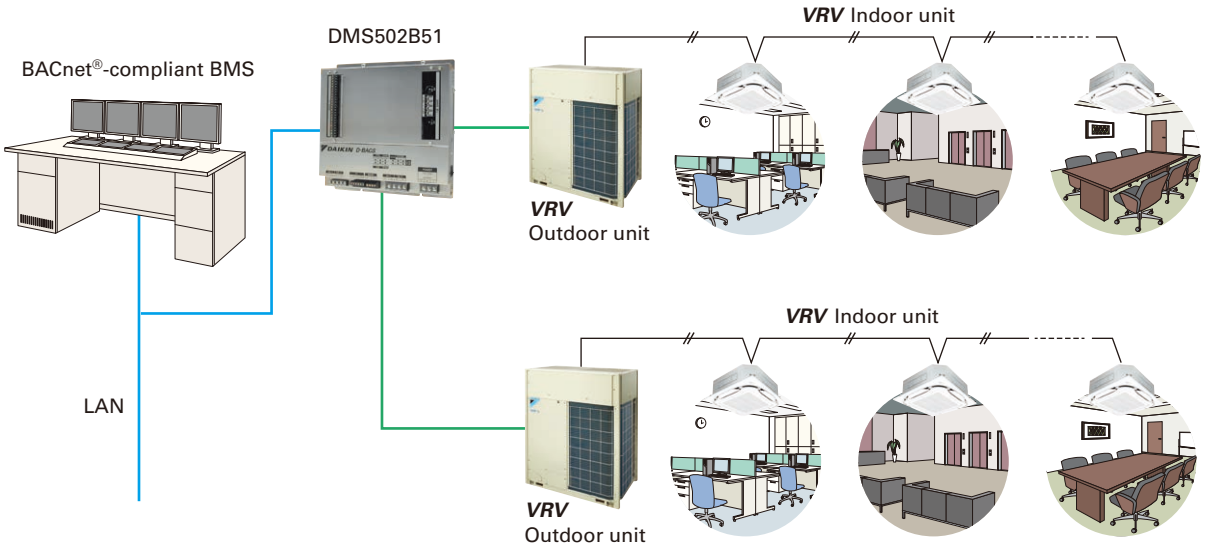
Required equipment

DMS502B51 (Up to 128 ***VRV*** indoor units can be connected.)
DAM411B51 (Up to 128 ***VRV*** indoor units can be added by incorporating into DMS502B51.)

∗BMS and BMS-related equipment are provided by customer.

Operating conditions

One DMS502B51 can connect up to 128 ***VRV*** indoor units and up to 256 indoor units can be connected to BMS by adding an expansion adaptor.



·BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

DMS502B51 Functions

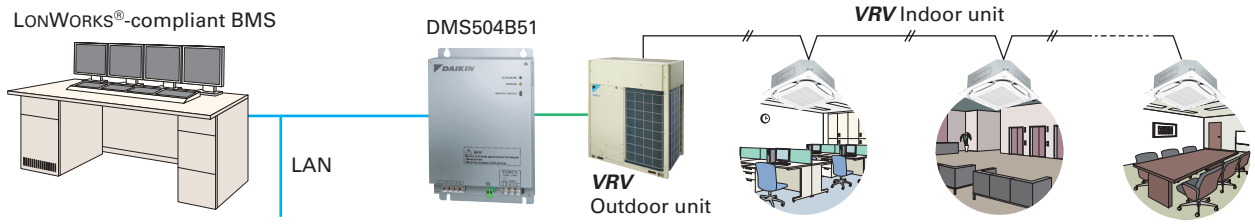
Category	Detail
Start / Stop	Operation / Monitoring
Operation mode	Operation / Monitoring
Room temperature	Operation / Monitoring
Error	Monitoring
Filter sign	Reset / Monitoring
Remote controller operation	Allow / Prohibit setting
Fan step	Operation / Monitoring
Forced thermostat OFF	Operation / Monitoring
Energy-saving command	Operation / Monitoring

By connecting the DAM412B51 and the watt meter of the ***VRV*** outdoor unit, it is possible to use power proportional distribution (PPD) data for each indoor unit on the BMS.

A *VRV* system can be easily connected to LonWorks®-compatible BMS.

Required equipment
DMS504B51
∗BMS and BMS-related equipment are provided by customer.

Operating conditions
One DMS504B51 can connect up to 64 ***VRV*** indoor units to BMS.



•LonWorks® is a trademark of Echelon Corporation registered in the United States and other countries.

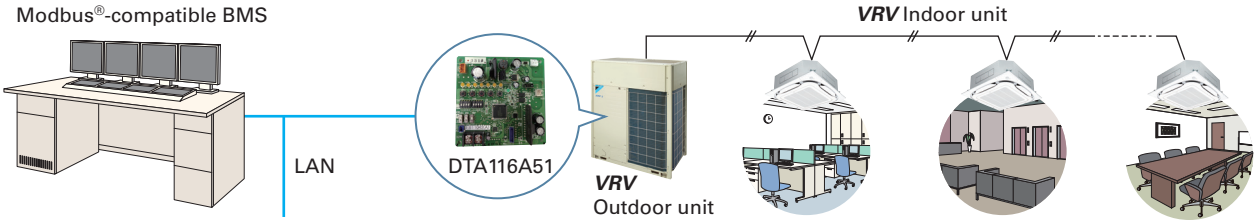
DMS504B51 Functions

Category	Detail
Start / Stop	Operation / Monitoring
Operation mode	Operation / Monitoring
Room temperature	Operation / Monitoring
Error	Monitoring
Filter sign	Reset / Monitoring
Remote controller operation	Allow / Prohibit setting
Fan step	Operation / Monitoring
Forced thermostat OFF	Operation / Monitoring

A *VRV* system can be easily connected to Modbus®-compatible BMS.

Required equipment
DTA116A51
∗BMS and BMS-related equipment are provided by customer.

Operating conditions
One DTA116A51 can connect up to 16 ***VRV*** indoor units to BMS.



•Modbus® is a registered trademark of Schneider Electric S.A.

DTA116A51 Functions

Monitor	
On/Off	On/Off status of indoor units
Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Setpoint	Setpoint of indoor units
Room temperature	Setpoint of indoor units
Fan direction	Swing, Flap direction (depend on indoor unit capability)
Fan volume	L, M, H (depend on indoor unit capability)
Forced off status	Forced off status of indoor units
Error	Malfunction, Warning with Error code
Filter sign	Filter sign of indoor units
Communication status	Communication normal/error of indoor units

Control	
On/Off	On/Off control of indoor units
Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Setpoint	Cooling/Heating setpoint
Fan direction	Swing, Stop, Flap direction (depend on indoor unit capability)
Fan volume	L, M, H (depend on indoor unit capability)
Filter sign reset	Reset filter sign of indoor units

Retrieve system informatioin	
Connected indoor units	DIII-NET address of connected indoor units can be retrieved.
Indoor unit capabilities	Indoor unit capabilities such as operation mode, fan control, setpoint HV can be retrieved.

Controller Comparison

Target		Controller	*VRV* system	Building Equipment	Automatic Control	Energy Management	AC Billing Calculation	Smartphone Control
Residential		DTA116A51	Up to 16 indoor units	NO	By HA	By HA	NO	By HA
		SVMPR1+DTA116A51	Up to 16 indoor units	NO	NO	NO	NO	YES
Small-Sized Commercial Building		SVMPC1+DTA116A51	Up to 32 indoor units	YES	YES	YES	NO	YES
Medium-Sized Commercial Building		*intelligent touch Manager*	Up to 64 indoor units	YES	YES	YES (+ DCM009A51)	NO	NO
		intelligent touch Manager + SVMPC1	Up to 64 indoor units	YES	YES	YES	YES (+ DCM002A51)	YES
		intelligent touch Manager + SVMPC2	Up to 64 indoor units	YES	YES	NO	NO	YES
Hotels	**Villa Type**	SVMPS2	Up to 16 indoor units	NO	YES	NO	NO	NO
		intelligent touch Manager + SVMPC1 + SVMPS3	Up to 2,560 indoor units	NO	YES	NO	NO	NO
Large-Sized Commercial Buildings		*intelligent touch Manager* + iTM plus adaptor	Up to 512 indoor units	YES	YES	YES (+ DCM009A51)	NO	NO
		intelligent touch Manager + iTM plus adaptor + SVMPC1	Up to 2,560 indoor units	YES	YES	YES	YES (+ DCM002A51)	YES
Multi-Site Management		MSMPN1	YES	YES	YES	YES	NO	YES
BMS Connection		DMS502B51	Up to 256 indoor units	NO	By BMS	By BMS	By BMS	By BMS
		DMS504B51	Up to 64 indoor units	NO	By BMS	By BMS	NO	By BMS
		DTA116A51	Up to 16 indoor units	NO	By BMS	By BMS	NO	By BMS

Warning

- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.

If you have any enquiries, please contact your local importer, distributor and/or retailer.

VRV is a trademark of Daikin Industries, Ltd.
VRV Air Conditioning System is the world's first individual air conditioning system with variable refrigerant flow control and was commercialised by Daikin in 1982.
VRV is the trademark of Daikin Industries, Ltd., which is derived from the technology we call "variable refrigerant volume."

JMI-0107

Organization:
DAIKIN INDUSTRIES, LTD.
AIR CONDITIONING MANUFACTURING DIVISION

Scope of Registration:
THE DESIGN/DEVELOPMENT AND MANUFACTURE OF COMMERCIAL AIR CONDITIONING, HEATING, COOLING, REFRIGERATING EQUIPMENT, HEATING EQUIPMENT, RESIDENTIAL AIR CONDITIONING EQUIPMENT, HEAT RECLAIM VENTILATION, AIR CLEANING EQUIPMENT, COMPRESSORS AND VALVES.

JQA-1452

Organization:
DAIKIN INDUSTRIES (THAILAND) LTD.

Scope of Registration:
THE DESIGN/DEVELOPMENT AND MANUFACTURE OF AIR CONDITIONERS AND THE COMPONENTS INCLUDING COMPRESSORS USED FOR THEM

EC99J2044

All of the Daikin Group's business facilities and subsidiaries in Japan are certified under the ISO 14001 international standard for environment management.

Dealer

DAIKIN INDUSTRIES, LTD.
Head Office:
Umeda Center Bldg., 2-4-12, Nakazaki-Nishi,
Kita-ku, Osaka, 530-8323 Japan

Tokyo Office:
JR Shinagawa East Bldg., 2-18-1, Konan,
Minato-ku, Tokyo, 108-0075 Japan

http://www.daikin.com

©All rights reserved
05/19 AD

•Specifications, designs and other content appearing in this brochure are current as of May 2019 but subject to change without notice.