

# BACnet Gateway

## System Network Solution



*Integrated Control System  
for Seamless Connection  
between VRV and BMS Systems*

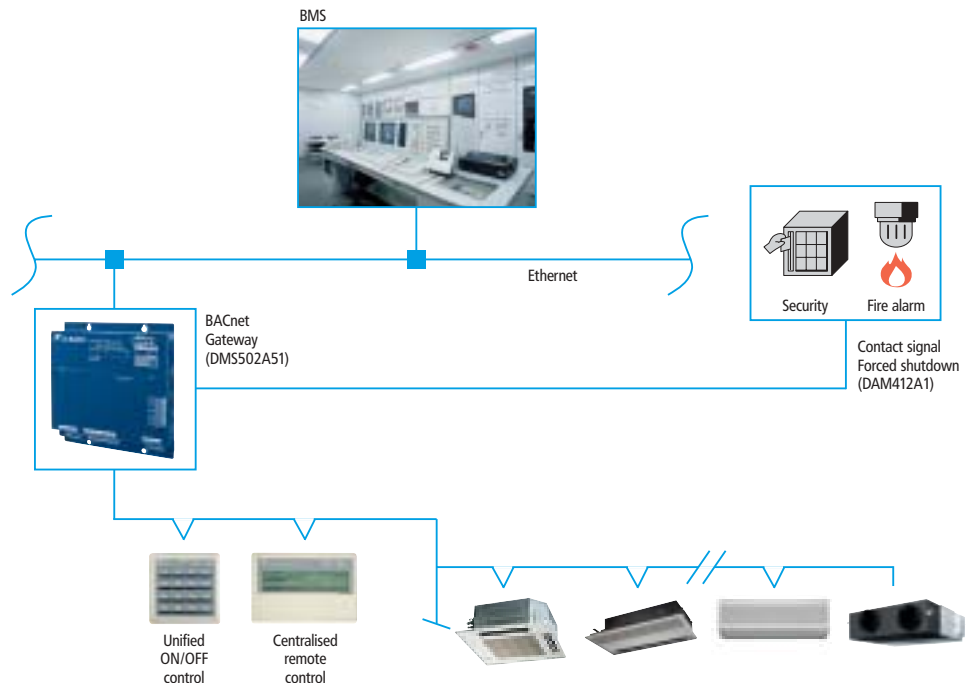
# Main Features

## 1 BACnet Gateway

- ensures precise and efficient monitoring and control of VRV and HRV systems. Also Split & Sky Air units can be connected via an optional interface adapter
- is a flexible, multi purpose system
- control mechanism is BACnet™
- provides easy integration in to building management systems (BMSs) including management of all building installations in remote control or interlocked control

## 2 Open Network Integration

Daikin has released a new adapter that requires no additional interfaces nor gateways for connection to BACnet™ network equipment and building control systems. BACnet™ networks are recognised worldwide as the de facto standard within the building controls industry. BACnet™ data communication protocol makes it possible to control access, energy management, fire/life/safety, HVAC and lighting etc.



## 3 Quick and Easy Installation

The open protocol specification gives local system integrators complete design freedom. Also the ability to combine individual items of equipment into BACnet™ network reduces the time and costs required for wiring work.

## 4 Unlimited Site Size

The network adapter can be connected to 64 groups (256 with optional accessory). Maximum value of BACnet Gateway is set by BACnet BMS.

## 5 Functions

### MONITORING

- Air conditioning status monitoring: 64 groups of indoor units and 10 outdoor units. (Max 256 groups of indoor units and 40 outdoor units, when optional DIII board is added)\*
- Indoor unit error monitoring
- Indoor (air inlet) temperature monitoring
- Filter sign monitoring
- Thermostat status
- Compressor operation status
- Indoor fan operation
- Heater operation
- Air direction monitoring
- Air flow rate monitoring
- Forced thermostat off/on monitoring

\* If exceeding the stated number of outdoor units, DIII-NET expander adapter <DTA109A51> allows easy system connection as long as restrictions are observed.

### CONTROL, OPERATION AND SETTINGS

- Start / stop control
- Temperature adjustment mode setting
- Remote control setting
- Temperature setting
- Filter sign reset
- Indoor unit mode setting
- Air direction setting
- Air flow rate setting
- Forced thermostat off/on setting
- Energy efficiency command (setting temperature shift)

### DISPLAY

- Air condition unit operation setting and status
- Set temperature
- Indoor unit error
- Indoor (air inlet) temperature
- Filter sign

## 6 Specifications of Communication

### OBJECTS

- Analog input
- Analog output
- Analog value
- Binary input
- Binary output
- Binary value
- Multistate input
- Multistate output

### FUNCTIONALITY

- Monitoring
- Commanding
- Alarming

### DATALINK

- Ethernet(IEEE802.3)
- BACnet/IP

## 7 Compatibility with Leading BMS Systems, a.o.:

Manufacturer*	Type
Johnson Controls	Metasys BSI
Siemens (Landis & Staefa)	SYSTEM 600 APOGEE DESIGO INSIGHT 1.01
Honeywell	EBI
Andover Controls	Continuum
Iconix OPC Server (Sauter Italy)	
Cimetrics OPC Server (T A/C pacific in Australia)	
Trilogy (France)	

\* Please contact your Daikin distributor for further details or other manufacturers concerning compatibility.

## 8 Specifications

Item	Description
BACnet Gateway	DMS502A51
BACnet™ transmission	64 units per Gateway ASHRAE135 (IEEE802.3) BACnet/IP Conformance class3
Power supply	1~, 200 to 240VAC, ± 10% at 50/60Hz
Power consumption	20W max.
Dimensions (HxWxD)	mm 281x260x58.5
Weight	kg ± 4
Ambient condition	-10°C to 50°C within humidity range between 0% and 98% (no condensation)
Insulation resistance	At least 50MΩ at 500VDC

## 9 Accessories

Item	Description
DIII board	DAM411A1
Digital input /output	DAM412A1
Interface adapters	KRP928A2S
	DTA102A51/52



Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.



Daikin units comply with the European regulations that guarantee the safety of the product.



ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment.

VRV products are not within the scope of the Eurovent certification programme

Specifications are subject to change without prior notice

Daikin products are distributed by:

### DAIKIN EUROPE N.V.

Zandvoordestraat 300  
B-8400 Oostende, Belgium  
Internet: <http://www.daikineurope.com>