

**NEW SERIES**

# **AIRSTAGE™ V-II**

*Variable Refrigerant Flow System*

***Multi Air Conditioning System for Buildings***





# AIRSTAGE<sup>TM</sup> V-II

Variable Refrigerant Flow System

**Multi Air Conditioning System for Buildings**

INVERTER HEAT PUMP TYPE

**Total pipe length  
up to 1,000m**

Actual pipe length  
**150m max.**

Total pipe length  
**1,000m max.**

Height difference  
between outdoor and  
indoor units

**50m max.**

For the outdoor  
unit stated  
below : 40m max.

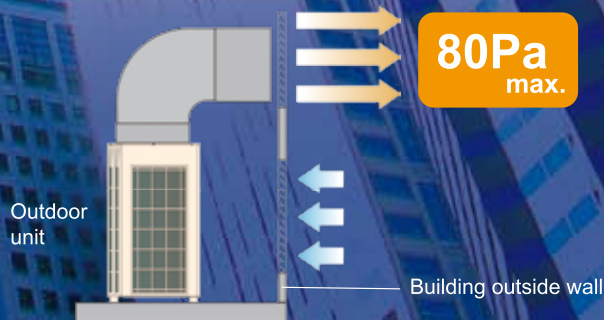
Height difference  
between indoor  
and indoor units

**15m max.**

Pipe length from first  
separation tube to the  
farthest indoor unit

**60m max.**

**External static pressure  
up to 80Pa**



## Newly designed compact outdoor unit

Smart and cutting edge design

Extensive lineup from 8HP to 48HP in 2HP increment

Connectable indoor unit capacity ratio up to 150%

8, 10, 12HP



DIMENSIONS: H 1,690 X W 930 X D 765 (mm)

14, 16HP



DIMENSIONS: H 1,690 X W 1,240 X D 765 (mm)

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# HIGH EFFICIENCY OPERATION

## High efficiency

Efficiency has significantly improved by the latest innovative technology.



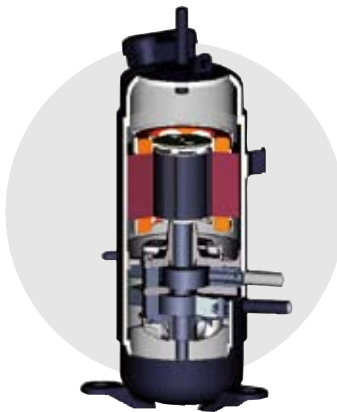
## Innovative Technology

### NEW Sine wave DC inverter control



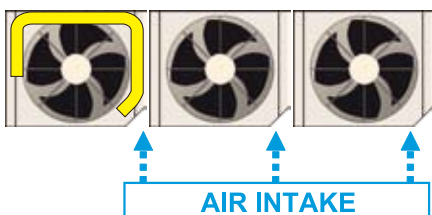
Use of sine wave DC inverter control allows high efficiency and energy saving.

### NEW DC twin rotary compressor



High performance DC twin rotary compressor maximizes efficiency from low speed to high speed operation.

### NEW Front intake port (omnidirectional intake)



Front intake port is designed to prevent decreasing airflow when multiple outdoor units are installed.

### NEW Powerful large propeller fan

A newly designed by CFD analysis fan achieves high performance and low noise operation.



### NEW DC fan motor



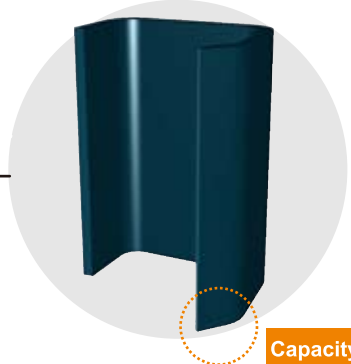
High performance and high efficiency compact DC fan motor.

### NEW Subcool heat exchanger



Heat exchanger efficiency is increased up to approx. 100% by use of heat exchanger tube with high heat transfer dual coil.

### NEW Heat exchanger

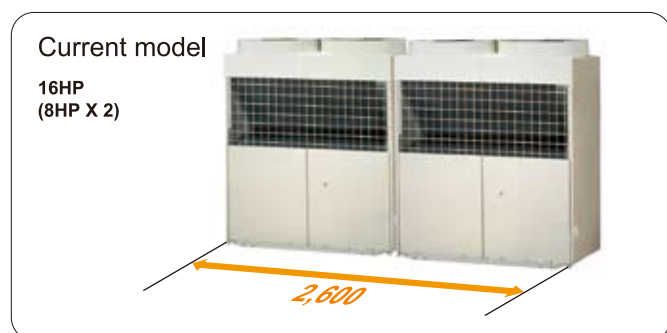
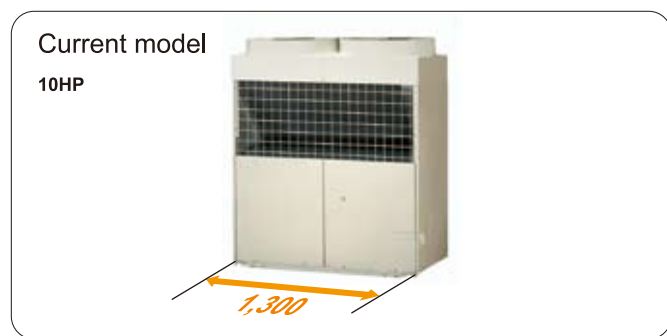


Capacity 5% increase

Capacity is increased 5% due to new unique design.

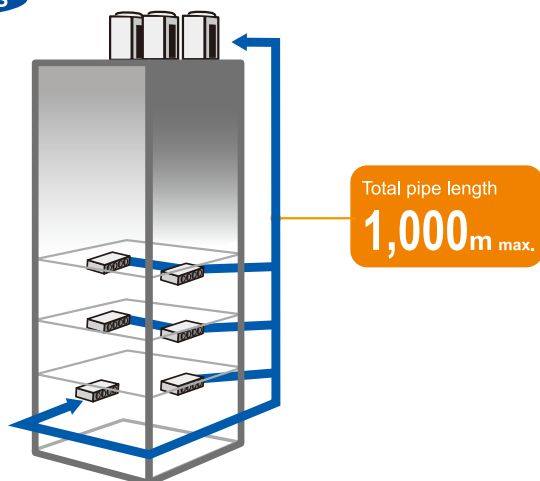
# DESIGN FREEDOM

## Space saving



## Total pipe length up to 1,000m

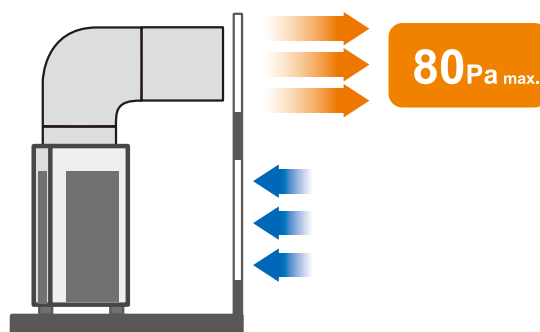
TOP CLASS



## External static pressure up to 80Pa

TOP CLASS

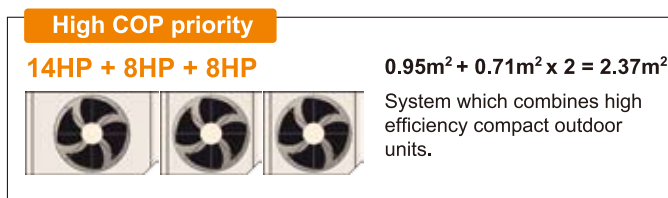
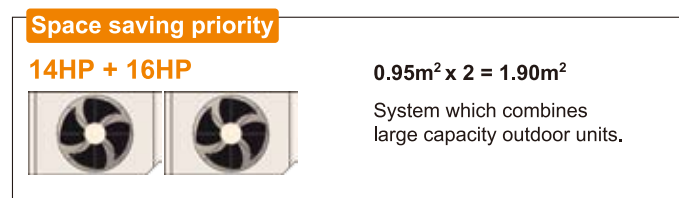
Large diameter fan and DC fan motor adopted. External static pressure up to 80Pa. This is 2.6 times greater than current model. Installation on each floor and installation of balcony, etc. is possible.



## Selectable space saving/High COP combination

Outdoor unit combination is selectable from two concepts.

■ Example : 30HP system





# EASY INSTALLATION

## Automatic address setting

Each indoor unit address setting can be performed automatically, realizing shortened installation time.

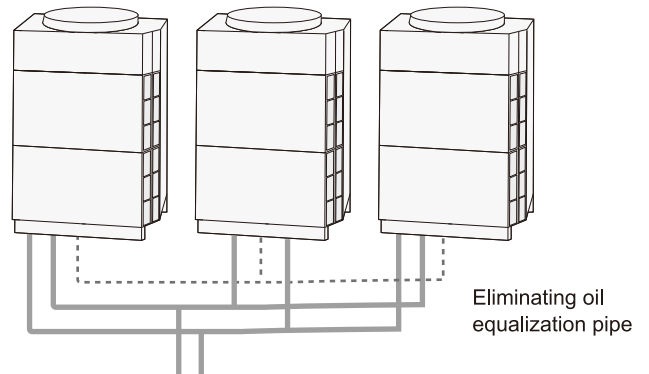
## Light weight outdoor unit

Compact and light weight design allows for easy installation and transportation.

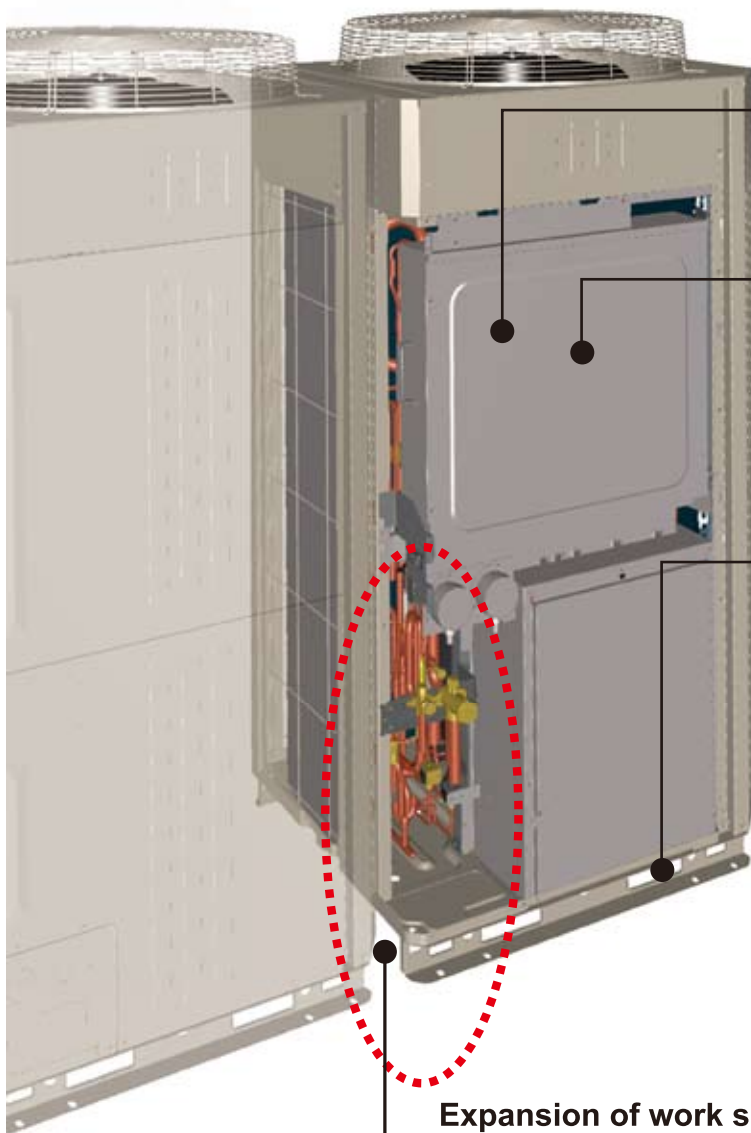
**20% weight reduction**  
(than current model)

Note: In the case of 14HP

## Simple piping



## Friendly design for installation work



### Integration of electric parts

Setting and maintenance are carried out easily as all electrical components are allocated in one box at workable position.

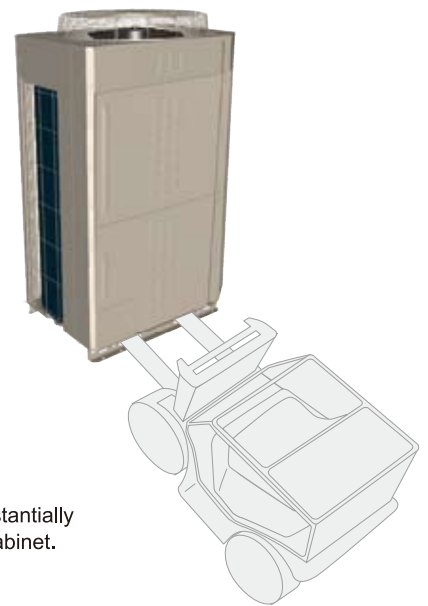
### 7-segment LED display



Easy-to-understand 7-segment LED display.

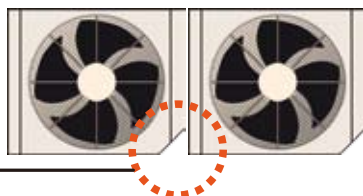
### Easy handling

Easy transport by slot hole for forklift and crane.



### Expansion of work space

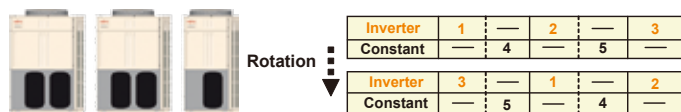
In the case of multi unit installation, workability is substantially improved by using the side cut section space of the cabinet.



# HIGH RELIABILITY

## Compressor rotation function

Load at starting and stopping of each compressor is reduced. Durability and reliability are improved by compressor rotation control.



## Backup operation



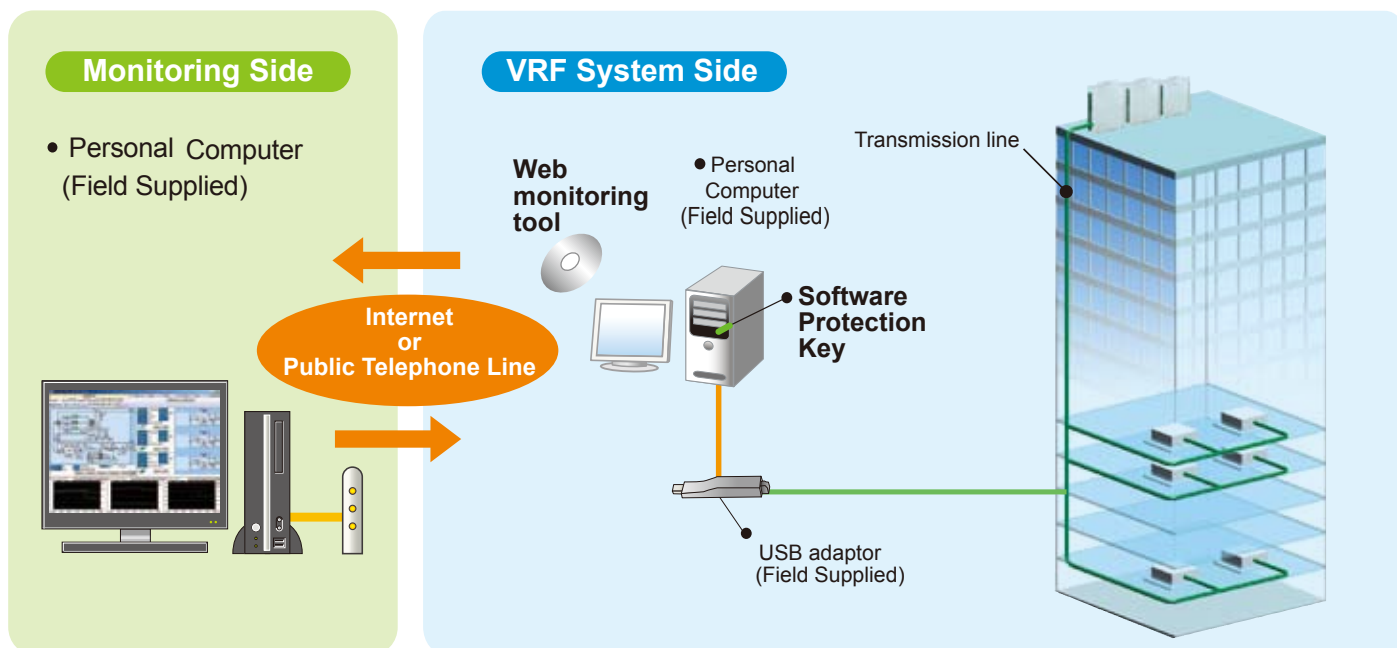
If one compressor fails, emergency operation will allow the remaining compressors.



If one outdoor unit fails, the remaining outdoor units will continue operating as emergency operation.

## Web monitoring system

The operational status of the VRF system within the building can be monitored in real time over the Internet.



# IMPROVED COMFORT

## Quiet operation

Outdoor unit



### Night operation mode

Automatically switched to quiet operation mode from outdoor unit by timer setting.

Indoor unit



## Noise reduction of compressor

Operation noise of the outdoor unit is suppressed as the compressor housed in a





# CONTROLS SYSTEM

Every user's needs are supported by offering a variety of controls, such as individual control, central control and building management system control options

## Central Control

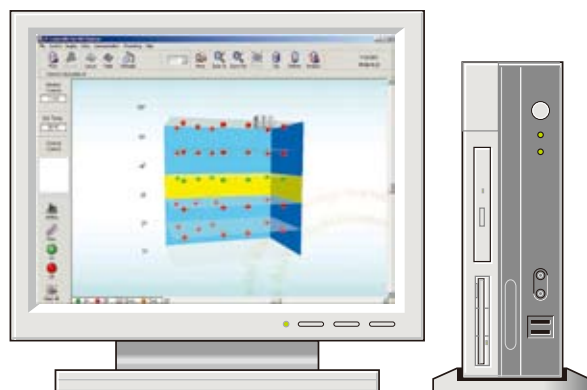
### 1 PC Controller

New

Max.  
controllable  
indoor units

1600

- Remote access for monitoring and control
- 3D graphical display interface
- User friendly operation
- Central building monitoring and control
- Central control (locked individual controller function)
- Automatic cooling/heating changeover
- Power proportional distribution
- Annual schedule control
- Error display
- Set temperature limitation



### 2 Touch Panel Controller

New

Max.  
controllable  
indoor units

400

- Stylish design
- 7.5 inch color TFT-LCD touch panel screen
- Central control (locked individual controller function)
- Annual schedule control
- Easy operation
- Up-to-date status display



### 3 Group Remote Controller

Centrally controls up to 8 remote controller groups  
(Up to 96 indoor units)

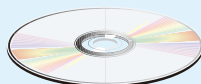


\* For connecting to VRF System, network convertor is necessary. Also, the maximum of 4 units of group remote controllers can be connected to this convertor.

#### Interface for Building Management System

Adopting BACnet®, the open network with high versatility renowned worldwide, network can connect VRF system and BMS/BAS.

#### 4 BACnet® Gateway Software



CD-ROM(Software)

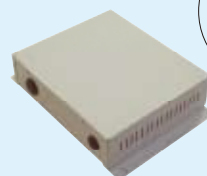


Software Protection Key

Max.  
Connectable  
Indoor Units  
1600

BMS of LONWORKS® can be connected to VRF system by use of network convertor.

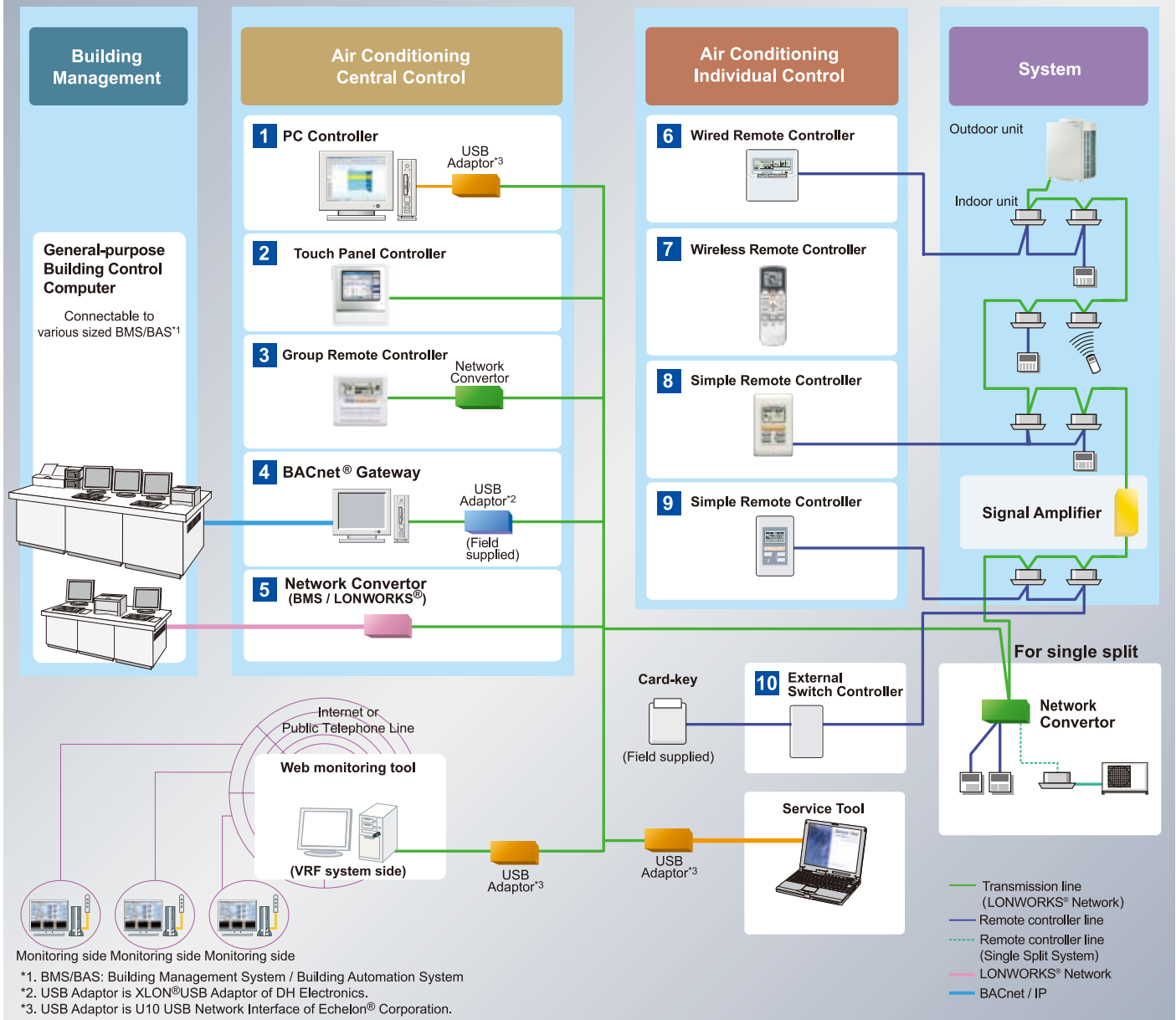
#### 5 Network Convertor for LONWORKS®



Max.  
Connectable  
Indoor Units  
128



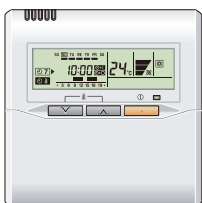
## System Diagram



## Individual Control

### 6 Wired Remote Controller

Operates the air conditioning system for a week according to the plan by built-in weekly timer.



### 7 Wireless Remote Controller

It can be used at your hand. 4 types of timers are available.



### 8 Simple Remote Controller

Designed for easy operation.



### 9 Simple Remote Controller

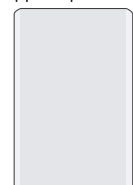
**without master control**  
Designed for easy operation without master control.



### 10 External Switch Controller

Air conditioner operation can be controlled by external equipment.

\*Card-key and other sensor switches are available as a field supplied parts.



# INDOOR UNIT LINEUP














11 Types, 49 Models, Capacity range from 2.2kW to 25.0kW

Comprehensive range of indoor units of variety design and capacity ranges available which can be selected to suit any air conditioning needs.

Capacity(kW)	2.2	2.8	3.6	4.5	5.6	7.1
Compact Cassette	 New	 New	 New	 New	 New	 New
Cassette					 New	 New
Compact Duct						
Low Static Pressure Duct						
Duct						
High Static Pressure Duct						
Floor / Ceiling						
Ceiling						
Compact Wall Mounted (EEV internal)	 New	 New	 New	 New		
Compact Wall Mounted (EEV external)						
	With this model connection of EV kit is necessary.					
Wall Mounted						

The indoor units above cannot be connected to the S or V Series.



9.0	11.2	12.5	14.0	18.0	22.4	25.0
 New	 New	 New	 New			
						
						
					 New	
						
						

# OUTDOOR UNIT LINEUP

21 system models, ranging from 8HP to 48HP in 2HP increment (22.4 - 134.4kW)

New

## Standard combination (Space saving priority)



8/10/12HP



14/16HP



18/20/22/24HP



26/28HP



30/32HP



34/36HP



38/40HP



42/44HP



46/48HP

## HEAT PUMP TYPE

Capacity	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
Outdoor Unit 1	8	10	12	14	16	10	10	12	12	16	16	16	16	12	12	14	16	16	16	16	16
Outdoor Unit 2	-	-	-	-	-	8	10	10	12	10	12	14	16	12	12	12	12	14	16	16	16
Outdoor Unit 3	-	-	-	-	-	-	-	-	-	-	-	-	-	10	12	12	12	12	12	14	16
Maximum Connectable Indoor Unit	15	16	18	21	24	32	32	33	36	39	42	45	48	48	48	48	48	48	48	48	48

## Energy efficiency combination (High COP priority)



16/20HP



22HP



24/26/28HP



30/32/34HP



36/38/40HP



42/44HP

## HEAT PUMP TYPE

Capacity	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
Outdoor Unit 1	-	-	-	-	8	-	12	14	8	10	12	14	14	14	14	14	14	14	16	-	-
Outdoor Unit 2	-	-	-	-	8	-	8	8	8	8	8	8	10	12	14	14	14	14	14	-	-
Outdoor Unit 3	-	-	-	-	-	-	-	-	8	8	8	8	8	8	8	10	12	14	14	-	-
Maximum Connectable Indoor Unit	-	-	-	-	30	-	32	33	36	39	48	48	48	48	48	48	48	48	48	-	-

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