S (Heat Pump) series Y (Heat Pump) series **Cooling or Heating**



S series - PUMY-P VHMB(-BS) PUMY-P YHMB(-BS)

Y series

PUHY-P YJM-A(-BS) ^LPUHY-P YSJM-À(-BS)

PUHY-EP YJM-A(-BS) PUHY-EP YSJM-A(1)(-BS)

The two-pipe zoned system designed for Heat **Pump Operation**

The CITY MULTI S series (for small applications) and Y series (for large applications) make use of a two-pipe refrigerant system, which allows for system changeover from cooling to heating, ensuring that a constant indoor climate is maintained in all zones. The compact outdoor unit utilizes R410A refrigerant and an INVERTER-driven compressor to use energy effectively.

With a wide line-up of indoor units in connection with a flexible piping system, the CITY MULTI series can be configured for all applications. Up to 12 (S series) or 50 (Y series) indoor units can be connected with up to 130% connected capacity to maximize engineer's design options. This feature allows easy air conditioning in each area with convenient individual controllers.

Small Offices (S series)



System Pipe Lengths

)

Refrigerant Piping Lengths Total length Maximum allowable length Farthest indoor from first branch····	Maximum meters [Feet] 120 [393] 80 [262] 30 [98]
Vertical differentials between units Indoor/outdoor (outdoor higher)·····	Maximum meters [Feet] 50 [164]





1When the outdoor unit is installed below the indoor unit, top-bottom differential is 20m [65ft].







[8-50HP (Y series)] [8-36HP (High COP Y series)]

Refrigerant Piping Lengths	Maximum meters [Fe
Total length · · · · · · · · · · · · · · · · · · ·	1,000 [3,280]
Maximum allowable length	165 (190equivale
	[541(623)]
Farthest indoor from first branch	40 [131]

rtical diffe /outdoor (outdoor higher)..... 50 [164]*1 ndoor/outdoor (outdoor lower)··· 40 [131]*1 15 [49]



*1 When the outdoor unit is installed below the indoor unit, top-bottom differential is 40m [131 ft]. *2 Depending on the model and installation conditions, top-bottom differential 90m [295ft] (o/u above) and 60m [196ft] (o/u below) is available. For more detailed information, please co your nearest sales office or distributor.

distributor

R2 (Heat Recovery) series

Simultaneous Cooling and Heating

-PURY-P YJM-A(-BS) R2 series **PURY-P YSJM-A(1)(-BS)**

The world's first two-pipe system that **Simultaneously Cools and Heats**

CITY MULTI R2 series offers the ultimate in freedom and flexibility. Cool one zone while heating another. Our exclusive BC controller makes two-pipe simultaneous cooling and heating possible. The BC controller is the technological heart of the CITY MULTI R2 series. It houses a liquid and gas separator, allowing the outdoor unit to deliver a mixture of hot gas for heating and liquid for cooling, all through the same pipe. This innovation results in virtually no energy wasted by being expelled outdoors. Depending on capacity, up to 50 indoor units can be connected with up to 150% connected capacity





PURY-EP YJM-A(-BS) PURY-EP YSJM-A(1)(-BS)

Outdoor Unit

Common Features in Y (Heat Pump) series & R2 (Heat Recovery) series

New Lineup Y/ R2 series(YJM)



In addition to outdoor unit "S" and "L" module, a new "XL" module is introduced.

The three modular form can be combined to create systems up to 50HP in Y series and up to 36HP in R2 series.

HP		8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
Capacity	Cooling	22.4	28	33.5	40	45	50	56	63	69	73	80	85	90	96	101	108	113	118	124	130	136	140
Сараску	Heating	25	31.5	37.5	45	50	56	63	69	76.5	81.5	88	95	100	108	113	119.5	127	132	140	145	150	156.5
Mariala	S module	•	•	•				•+•	•+•		•						•+•	•+•					
	L module				•	•					•	•+•	•+•	•	•		•	۲	•+•	•+•+•	•+•	•+•	
(Pattern 1)	XL module													•		•+•					•	•	•+•
Module (Pattern 2)	S module							•+•		•+•		•											
	L module											•		•+•									
	XL module																						

<R2 Series-Standard>

HP		8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
Capacity	Cooling	22.4	28	33.5	40	45	50	56	63	69	73	80	85	90	96	101
	Heating	25	31.5	37.5	45	50	56	63	69	76.5	81.5	88	95	100	108	113
Madula	S module			•				•+•	•+•	•+•						
Wodule	L module												•+•	•+•	•	
(Pattern 1)	XL module															•+•
Madula	S module					•+•	•+•	•+•								
wodule	L module									•		•+•		•		
(Pattern 2)	XL module															

Improved performance

Improved heating capacity at low ambient temperature ensures 70% capacity at -15°C [5°F].

Cooling operation range is extended up to 46°C [115°F] from 43°C [109°F] with conventional model.



The manageability of the outdoor unit has been improved due to a drastic reduction in its weight, leading to easy transportation, installation, and reduction in withstand load.

Effective Use of Space





to use a crane



mm (in.)



Low Noise Levels New Fan Design

CITY MULTI VRF systems led the introduction of larger single fan motors some ten years ago, achieving substantially lower noise levels over multiple designs.

Continuing the development in the areas of blade shape and weight, Mitsubishi Electric have managed to achieve even higher performance and lower noise levels. To reduce noise levels further and comply with inner city residential noise regulations, all outdoor units include low noise mode. This function works by lowering the fan speed and compressor frequency proportionally with reduction in demand.

R410A Pipe Sizing

As R410A has a higher specific heat capacity than R22, the pipework is smaller. This means the pipe itself is cheaper, easier to install and less riser space is required within the building.



Based on 10HP mode

Easy Maintenance

Even when one of the indoor units in the system is under maintenance, the other indoor unit can still operate.

- * Not applicable to all situations.
- * Be sure to turn off the power to the indoor unit when repairing or servicing the unit.

System Check

Ensuring simple and easy maintenance, system tests are available to check wiring, sensors and the refrigerant amount.

Outdoor unit



The compressor compartment is sealed by metal panels to attain low noise levels in all directions.

Blue Fin Treatment

The anti-corrosion Blue Fin treatment of the heat exchanger is especially effective in urban environments where the traffic pollutions can damage the aluminum fins reducing the capacity and life expectancy of the unit. All CITY MULTI R410A outdoor units have been treated with Blue Fin.

*Standard:Anti-corrosion Blue Fin treatment & copper tube. BS type (optional):salt-resistant cross fin & copper tube.





60Pa High Static Pressure as standard

Both Y and R2 series correspond to high static pressure of 60Pa, ideal and flexible for any type of application.

Outdoor Unit