



Atom X

Mini VRF Inverter Technology
VRF Indoor Units
Up to 18 SEER2

Multi-professional certification



OUTDOOR UNIT + MULTIPLE VRF IDUS

Various VRF indoor unit can be controlled separately or centrally to meet different requirements



01 Flexible Controller Wiring

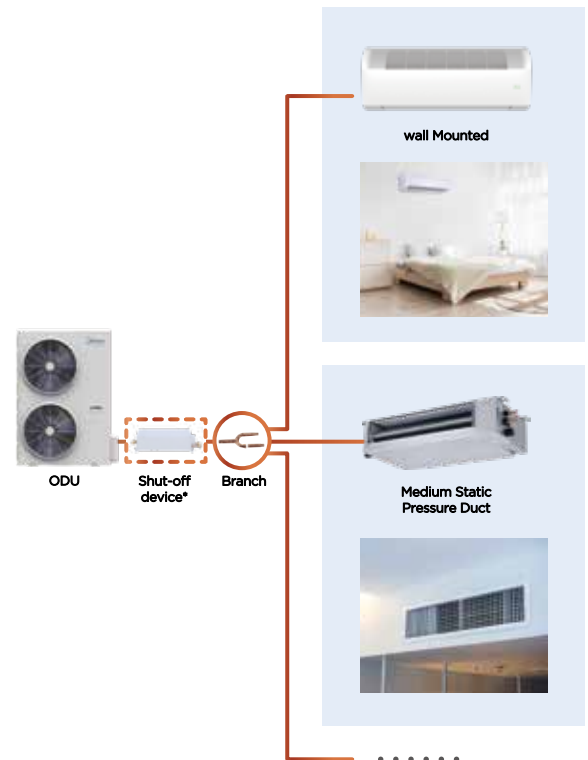
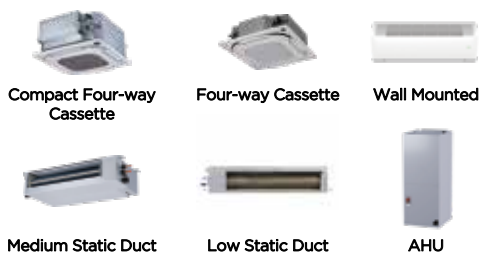
- Arbitrary topology communication
- Super anti-interference ability
- Communication distance up to 2000m



03 System Configurations

02 Multiple VRF IDUs

The AtomX VRF offers 6 types of indoor units to meet different scenarios.



*Shut-off device are not mandatory and are optional according to regulations. Shut-off device must be purchased separately from Midea.

R454B Refrigerant

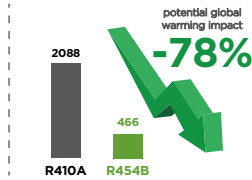
R454B is a lower GWP, better performance refrigerant that is kinder to the environment.



- ECO Friendly**
- Lower GWP 466
 - Less greenhouse gases emission

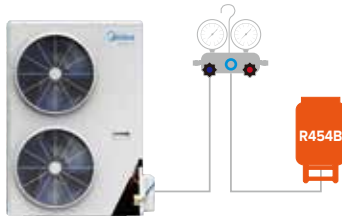


- Better Performance**
- Higher heat transfer coefficient
 - Less pressure loss
 - Higher heat recovery efficiency



Automatic Refrigerant Charging

Compared to manual refrigerant charging, automatic refrigerant charging greatly simplifies the process, making installation and maintenance easier and more efficient.



Automatic refrigerant charging

- Connect refrigerant tank to the outdoor unit & activate automatic charging function
- Close the shut-off valve automatically & finish the filling process

Automatic Method

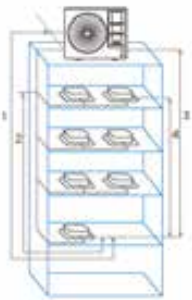


Manual refrigerant charging

- Calculate additional refrigerant quantity
- Connect refrigerant tank to the outdoor unit & start the filling process
- Observe the weight scale to check the refrigerant charge
- Close the shut-off valve manually & finish the filling process

Traditional Method

Long Piping Capability

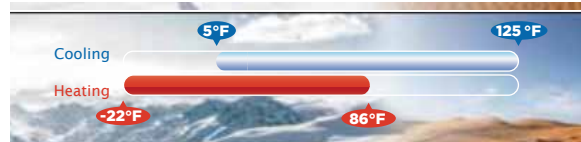


The AtomX can support a total piping length of up to 984ft, an installation height difference of up to 164ft between indoor and outdoor units, and up to 49ft between indoor units, making the AtomX perfectly suitable for small and medium-sized buildings.

Item		Capability (ft)	
		VRF	
		1.5-2Ton	2.5-5Ton
Total piping length		492	984
1. Longest piping length	Actual	296	296
	Equivalent	328	328
2. Longest piping length after first branch		131	131
3. Largest level difference between IDUs and ODU	ODU up	164	164
	ODU down	131	131
4. Largest level difference between IDUs		49	49

Wide Operating Range

AtomX Series can operate at temperatures as low as -22°F for heating and up to 125°F for cooling.



Refrigerant Safety Protection

Detect refrigerant leakage of the indoor unit. The shut-off device will cut off the refrigeration pipeline to prevent the R454B refrigerant of the outdoor unit from leaking into the room.



*The shut-off device must be purchased from Midea

AtomX Outdoor Unit Lineup



AtomX VRF Indoor Unit Lineup

01 Four-way Cassette

Capacity range : 09/12/15/18/24/30/36/48kBtu/h (8 models)

02 Medium Static Pressure Duct

Capacity range : 07/09/12/15/18/24/30/36/48kBtu/h (9 models)

03 Wall Mounted

Capacity range : 05/07/09/12/15/18/24kBtu/h (7 models)

04 Compact Four-way Cassette

Capacity range : 05/07/09/12/15/18kBtu/h (6 models)

05 Low Static Pressure Duct

Capacity range : 05/07/09/12/15/18/24/30/36kBtu/h (9 models)

06 Multi-Position Air Handler

Capacity range : 12/18/24/30/36/48/54/60kBtu/h (8 models)

INDOOR UNIT SPECIFICATIONS

Wall Mounted



Model			MIH05GMN10	MIH07GMN10	MIH09GMN10	MIH12GMN10	MIH15GMN10	MIH18GMN10	MIH24GMN10
Power supply			1-phase, 208/230V, 60Hz						
Cooling	Capacity	Btu/h	5000	7500	9500	12000	15000	18000	24000
Heating	Capacity	Btu/h	5800	8500	10900	13000	17000	20000	27000
Unit	Net dimensions (WxHxD)	in.	29-1/2x11-5/8x10-7/16				37-3/8x11-5/8x10-7/16		47-1/4x11-5/8x10-7/16
	Packed dimensions (WxHxD)	in.	38-3/4x15-3/16x14-3/16				46-5/8x15-3/16x14-3/16		56-1/8x15-3/16x14-3/16
	Net/Gross weight	lbs	23/31				27.5/35		34/43

Four-Way Cassette



Model			MIH09Q4MN10	MIH12Q4MN10	MIH15Q4MN10	MIH18Q4MN10	MIH24Q4MN10	MIH30Q4MN10	MIH36Q4MN10	MIH48Q4MN10
Power supply			1-phase, 208/230V, 60Hz							
Cooling	Capacity	Btu/h	9000	12000	15000	18000	24000	30000	36000	48000
Heating	Capacity	Btu/h	10000	13500	17000	21000	27000	34000	40000	54000
Indoor unit	Net dimensions (WxHxD)	in.	33-1/16x8x33-1/16		33-1/16x9-11/16x33-1/16			33-1/16x11-5/16x33-1/16		
	Packed dimensions (WxHxD)	in.	39-15/16x9-13/16x39-15/16		39-15/16x11-5/8x39-15/16			39-15/16x13-3/16x39-15/16		
	Net/Gross weight	lbs	45.2/60.6	50.7/63.9	51.8/67.2	57.3/72.8		61.7/78.3		

Compact Four-Way Cassette



Model			MIH05Q4CMN10	MIH07Q4CMN10	MIH09Q4CMN10	MIH12Q4CMN10	MIH15Q4CMN10	MIH18Q4CMN10
Power supply			1-phase, 208/230V, 60Hz					
Cooling	Capacity	Btu/h	5000	7000	9000	12000	15000	18000
Heating	Capacity	Btu/h	6000	8000	10000	13000	17000	21000
Indoor unit	Net dimensions (WxHxD)	in.	225-1/8x9-1/4x22-5/8					
	Packed dimensions (WxHxD)	in.	30-1/8x11-5/8x30-1/8					
	Net/Gross weight	lbs	30.9/44.1					33.1/46.3

Medium Static Pressure Duct



Model			MIH07T2MN10	MIH09T2MN10	MIH12T2MN10	MIH15T2MN10	MIH18T2MN10	MIH24T2MN10	MIH30T2MN10	MIH36T2MN10	MIH48T2MN10
Power supply			1-phase, 208/230V, 60Hz								
Cooling	Capacity	Btu/h	7000	9000	12000	15000	19000	24000	30000	38000	48000
Heating	Capacity	Btu/h	8000	10000	13500	17000	21000	27000	34000	42000	54000
Indoor unit	Net dimensions (WxHxD)	in.	27 x 9-5/8 x 31-7/8		34-13/16 9-5/8 31-7/8	44-11/16x9-5/8x31-7/8			58-7/16x9-5/8x31-7/8		
	Packed dimensions (WxHxD)	in.	33-7/8x12-13/16x38-3/4		41-3/4x12-13/16x38-3/4	51-9/16x12-13/16x38-3/4			65-3/8x12-13/16x38-3/4		
	Net/Gross weight	lbs	54/69.4	58.2/73.6	75/93.9	94.8/114.2			116.8/142.4		

Low Static Pressure Duct



Model			MIH05T3MN10	MIH07T3MN10	MIH09T3MN10	MIH12T3MN10	MIH15T3MN10	MIH18T3MN10	MIH20T3MN10	MIH34T3MN10	MIH36T3MN10
Power supply			1-phase, 208/230V, 60Hz								
Cooling	Capacity	Btu/h	5000	7000	9000	12000	15000	18000	24000	30000	36000
Heating	Capacity	Btu/h	6000	8000	10000	13500	17000	21000	27000	34000	40000
unit	Net dimensions (WxHxD)	in.	21-5/8x7-13/16x18-7/8		27-9/16x7-13/16x18-7/8		35-7/16x7-13/16x18-7/8		43-5/16x7-13/16x18-7/8	63x7-13/16x18-7/8	
	Packed dimensions (WxHxD)	in.	31-11/16x10-13/16x24-3/16		37-5/8x10-13/16x24-3/16		45-1/2x10-13/16x24-3/16		53-3/8x10-13/16x24-3/16	73x10-13/16x24-3/16	
	Net/Gross weight	lbs	27.6/38.6		32/44.1		39.7/52.9		48.5/62.8	67.2/93.7	

AHU



Model			MIH12VMN10	MIH18VMN10	MIH24VMN10	MIH30VMN10	MIH36VMN10	MIH48VMN10	MIH54VMN10	MIH60VMN10
Power supply			1-phase, 208/230V, 60Hz							
Cooling	Capacity	Btu/h	12000	18000	24000	30000	36000	48000	54000	60000
Heating	Capacity	Btu/h	13500	21000	27000	34000	40000	54000	60000	66000
Indoor unit	Net dimensions (WxHxD)	in.	18-1/8x41-5/16x20-1/2		19-11/16x46-7/16x21-5/8			22-1/16x54-1/2x24		
	Packed dimensions (WxHxD)	in.	20-3/4x42-3/8x24-3/16		22-5/16x47-1/2x25-3/8			24-11/16x55-9/16x27-3/4		
	Net/Gross weight	lbs	108/119		130/141			150/165		157/172

OUTDOOR UNIT SPECIFICATIONS

Model			MDV-V18WMN10T	MDV-V24WMN10T	MDV-V30WMN10T	MDV-V36WMN10T	MDV-V48WMN10T	MDV-V60WMN10T
Nominal Size - Tons			1.5	2	2.5	3	4	5
Cooling ¹	Capacity	Btu/h	18200	24400	30000	36000	48000	60000
	EER2	Btu/W	12.0	11.7	14.0	13.3	11.7	9.5
	SEER2	Btu/W	17.5	18.5	20	20	20	19.5
Heating ²	Capacity	Btu/h	20000	26000	30000	40000	50000	60000
	COP2	W/W	4.2	4.1	4.2	4.1	3.9	3.9
	HSPF IV	Btu/W	10	10	10.1	10.1	10.1	10.1
	HSPF V	Btu/W	7.4	7.5	7.6	7.5	7	6.6
Heating ³	Capacity	Btu	18000	20000	30000	34000	40000	42000
	COP	W/W	1.8	1.8	2.1	2	2	1.9
	Capability ratio	%	90%	77%	100%	85%	80%	70%
Ambient Temperature Range	Cooling (DB)	°F	5 ~ 125					
	Heating(DB)	°F	-22 ~ 86					
Refrigerant	Type		R-454B	R-454B	R-454B	R-454B	R-454B	R-454B
	Charge Amount -	oz.	58.2	58.2	109.3	109.3	144.6	144.6
Connections	Liquid pipe	in. (I.D.)	3/8	3/8	3/8	3/8	3/8	3/8
	Gas pipe (low pressure)	in. (I.D.)	5/8	5/8	5/8	5/8	3/4	3/4
	Total pipe length (actual)	ft.	492	492	984	984	984	984
	Longest pipe length (actual)	ft.	296	296	296	296	296	296
Connectable Indoor Units	Total capacity	%	65-130	65-130	50-130	50-130	50-130	50-130
	Maximum IDU quantity		3 units	4 units	5 units	5 units	7 units	9 units
Unit	Net dimensions (W×H×D)	in.	39-1/8 × 28 × 16-3/4			40-11/16×34×20-9/16		38-1/2×52-1/4×15-3/4
	Packed dimensions (W×H×D)	in.	41-5/6 × 35-1/16 × 19-1/16			44-1/16 × 38-9/16 × 22-1/16		42-5/8 × 56-1/2 × 17-1/8
	Net/Gross Weight	lbs	121/147			207/229		227/249
Sound Data		dB(A)	55	56	59	59	60	60

Note:

1. 95°F dry bulb /75°F wet bulb outdoor air temperature and 80°F dry bulb/67°F wet bulb entering indoor coil air, connected VRF Four-Way Cassette Indoor;
2. 47°F dry bulb/43°F wet bulb outdoor air temperature and 70°F dry bulb/60°F wet bulb entering indoor coil air, connected VRF Four-Way Cassette Indoor;
3. 5°F dry bulb/3°F wet bulb outdoor air temperature and 70°F dry bulb/60°F wet bulb entering indoor coil air, connected VRF Four-Way Cassette Indoor.

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