GMV Water

GMV Water combines the features of water source system with DC Inverter Multi VRF Units. It inherits the energy efficiency of water-cooled system and the comfortable and flexible characteristics of VRF units, which will provide a new air conditioning solution for high buildings, villas, hotels, comprehensive halls, etc. GMV Water can be divided into two parts: water system that exchanges energy between outdoor units and water/ground source; VRF refrigerating system from outdoor units to indoor units.

Key Features

Utilization of Renewable Resources

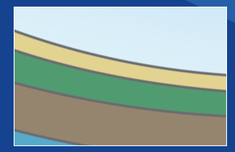
The water source of GMV Water can be a cooling tower, boiler or renewable resources: surface water (river, lake, and sea), ground water, soil, solar power, industrial waste heat or domestic waste water.

Regenerated Energy Resources


Sea water


Lakes


Rivers

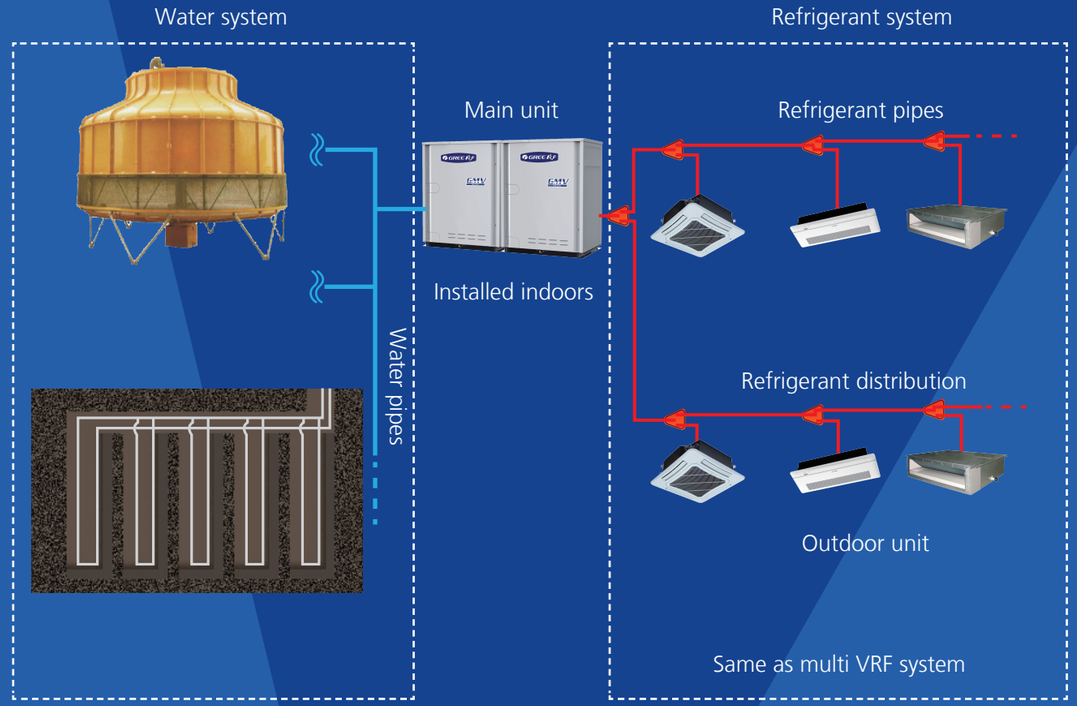

Ground Water


Earth


Solar Power

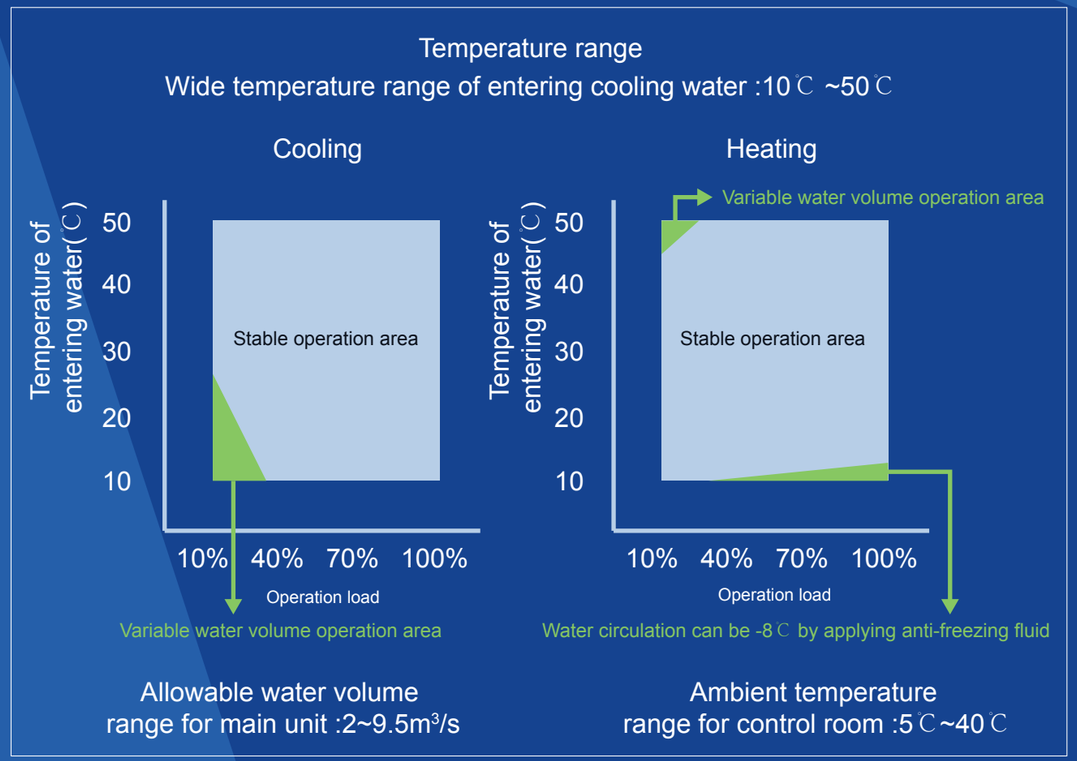

Industrial Waste Heat


Polluted Water and Waste Water



Wide Operating Range

Wide range for water entering the water side heat exchanger: 10~50℃; Water flow range of the main unit: 2~9.5m³/h, suitable in most of the places across the nation.



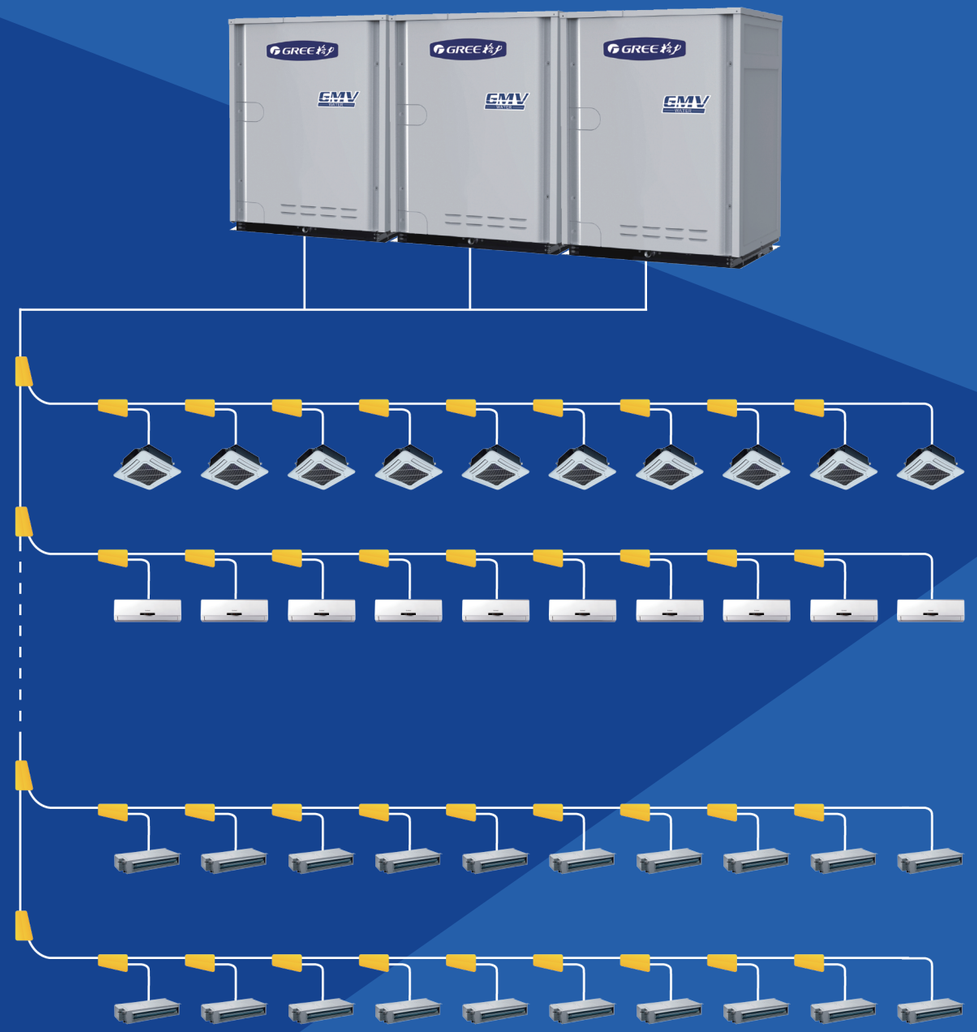
Large Capacity Design

- The combination of basic modules can have 4 modules at most, with maximum capacity of 134kW. The wide range of capacity can satisfy different construction demands.

22.4kW

134.0kW

- Up to 80 indoor units can be connected.



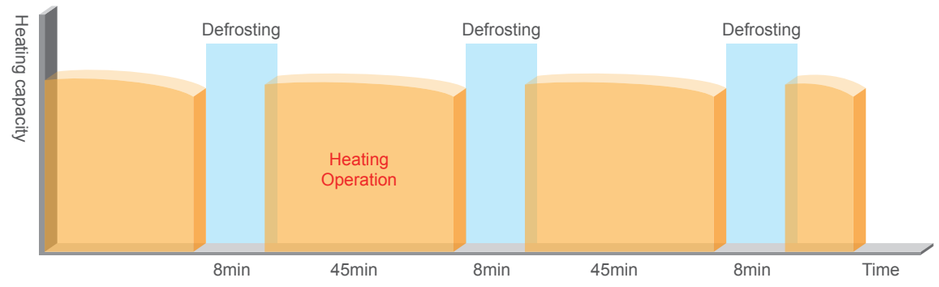
80 Sets

Operating in Turns, for Longer Service Life

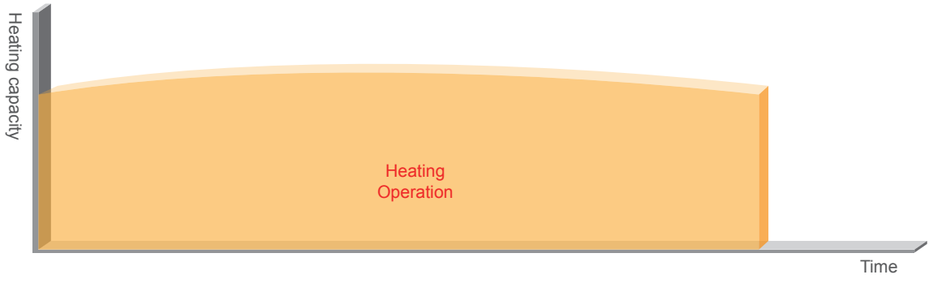
Each module starts up in sequence and operates in turn, which will effectively extend the units' service life.

Water-cooled System, No Need of Defrosting

The set temperature of each room may vary by the individual thermostat control of each indoor unit.
The cooling and heating operation can be performed at the same time.



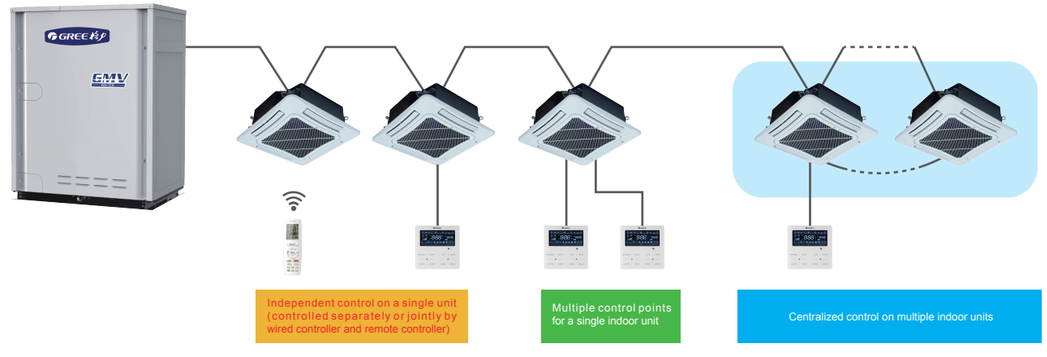
Air-cooled GMV



GMV Water

Completely New CAN Network Control

Same as GMV5, GMV Water adopts CAN communication, which has greatly improved the networking performance. It can be used in perfect combination with GMV5 indoor units.

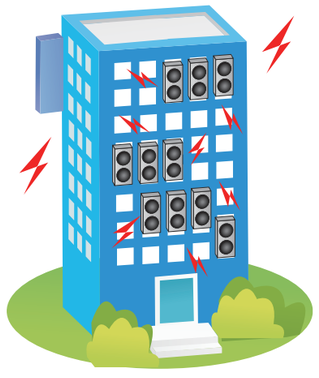


- Independent control on a single unit: every indoor unit can have an independent controller to realize independent control and management.
- Multiple control points for a single unit: one indoor unit can be connected to multiple wired controllers, which will together control one indoor unit.
- Centralized control on multiple indoor units: multiple indoor units can be connected to one wired controller to realize centralized control. One wired controller can control up to 16 indoor units.
- Joint control by remote controller and wired controller: remote controller is convenient for use and wired controller is with complete functions. With Gree's unique control logic, user can use both remote controller and wired controller to control a same indoor unit.

Fully Closed Design, Low Noise

Gree GMV Water System has a totally enclosed design. Unlike traditional outdoor units, this system has low noise, which is especially suitable for places where quietness is needed.

Fan noise



Air-cooled heat pump units

Quiet mode

Water-cooled heat pump units

No Weather Influence

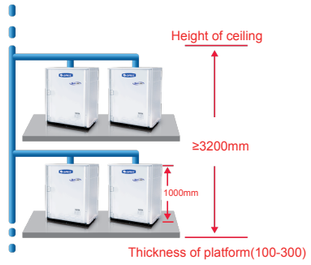
GMV Water exchange heat with water source and ground source without regard to the weather influence. Especially in winter, when it is running in heat mode, the outdoor unit will not generate frost like the air-cooled outdoor unit. There's no need to run defrosting mode, thus ensuring reliable heating performance.

Stable operation under all kinds of weather

Compact Size, Easy for Transportation and Installation

- Products of this series are all compact in size, can be transported in common passenger elevators, which will help save transportation cost and the project time.

- Compared with air-cooled VRF units, GMV Water require less floor space and lower installation height and are lightweight. Units can be installed one on top of the other, which is efficient in space utilization.



No Impact on Construction Appearance

Air-cooled air conditioners must be installed outdoors so that they can exchange heat with the air. However, outdoor installation space is limited and for the sake of preserving the construction beauty, more and more outdoor units are placed indoors. In order to ensure normal operation, there must have large quantities of grilles. As for GMV Water, there's no need to exchange heat with the air, therefore, the installation position is very flexible and can be coordinated with the construction design, having no impact on the construction appearance.

Water-cooled VRF　　Air-cooled VRF

ODU Combination Lineup

380-415V,50/60Hz

Model	GMV-W224WM/A-X	GMV-W280WM/A-X	GMV-W335WM/A-X
GMV-W448WM/A-X	●●		
GMV-W504WM/A-X	●	●	
GMV-W560WM/A-X		●●	
GMV-W615WM/A-X		●	●
GMV-W670WM/A-X			●●
GMV-W728WM/A-X	●●	●	
GMV-W784WM/A-X	●	●●	
GMV-W840WM/A-X		●●●	
GMV-W895WM/A-X		●●	●
GMV-W950WM/A-X		●	●●
GMV-W1005WM/A-X			●●●
GMV-W1064WM/A-X	●	●●●	
GMV-W1120WM/A-X		●●●●	
GMV-W1175WM/A-X		●●●	●
GMV-W1230WM/A-X		●●	●●
GMV-W1285WM/A-X		●	●●●
GMV-W1340WM/A-X			●●●●

208/230V,60Hz

Model	GMV-W224WM/A-F	GMV-W280WM/A-F	GMV-W335WM/A-F
GMV-W448WM/A-F	●●		
GMV-W504WM/A-F	●	●	
GMV-W560WM/A-F		●●	
GMV-W615WM/A-F		●	●
GMV-W670WM/A-F			●●
GMV-W728WM/A-F	●●	●	
GMV-W784WM/A-F	●	●●	
GMV-W840WM/A-F		●●●	
GMV-W895WM/A-F		●●	●
GMV-W950WM/A-F		●	●●
GMV-W1005WM/A-F			●●●
GMV-W1064WM/A-F	●	●●●	
GMV-W1120WM/A-F		●●●●	
GMV-W1175WM/A-F		●●●	●
GMV-W1230WM/A-F		●●	●●
GMV-W1285WM/A-F		●	●●●
GMV-W1340WM/A-F			●●●●

Outdoor Unit

380-415V,50/60Hz

Model			GMV-W224WM/A-X	GMV-W280WM/A-X	GMV-W335WM/A-X
Capacity	Cooling	kW	22.4	28	33.5
	Heating	kW	25	31.5	37.5
Sound pressure level		dB(A)	50	52	52
Power supply		Ph/V/Hz	3Ph/380-415V/50/60Hz		
Water flow volume		m^3/h	4.8	6	7.2
		CFM	2.83	3.53	4.24
Water pressure drop		Kpa	16	24	45
Rated Power Input	Cooling	kW	3.9	5.7	7.9
	Heating	kW	4	5.4	7.35
Refrigerant Connecting Pipe diameter	Gas	mm	Φ22.2	Φ22.2	Φ25.4
	Liquid	mm	Φ9.52	Φ9.52	Φ12.7
Water connecting pipe diameter	Inlet	mm	DN32	DN32	DN32
	Outlet	mm	DN32	DN32	DN32
Dimension(W×D×H)		mm	785×550×1000	785×550×1000	785×550×1000
Net weight/Gross weight		kg	162/165	162/165	162/165
Loading quantity	40' GP	set	108	108	108
	40' HQ	set	108	108	108

208/230V,60Hz

Model			GMV-W224WM/A-F	GMV-W280WM/A-F	GMV-W335WM/A-F
Capacity	Cooling	kW	22.4	28	33.5
	Heating	kW	25	31.5	37.5
Sound pressure level		dB(A)	50	52	52
Power supply		V/Ph/Hz	208/230V~3Ph~60Hz		
Water flow volume		m^3/h	4.8	6	7.2
		CFM	2.83	3.53	4.24
Water pressure drop		Kpa	16	24	45
Rated Power Input	Cooling	kW	3.9	5.7	7.9
	Heating	kW	4	5.4	7.35
Refrigerant Connecting Pipe diameter	Gas	mm	Φ22.2	Φ22.2	Φ25.4
	Liquid	mm	Φ9.52	Φ9.52	Φ12.7
Water connecting pipe diameter	Inlet	mm	DN32	DN32	DN32
	Outlet	mm	DN32	DN32	DN32
Dimension(W×D×H)		mm	785×550×1000	785×550×1000	785×550×1000
Net weight/Gross weight		kg	162/165	162/165	162/165
Loading quantity	40' GP	set	108	108	108
	40' HQ	set	108	108	108

Specifications of ODU Combination

380-415V,50/60Hz

Model	Power Supply	Capacity		Power Input		Dimension (W×D×H)	Water flow volume	Sound Pressure Level Semi-anechoic	Connecting pipe diameter		Min.circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating				Liquid	Gas			
	Ph/V/Hz	kW	kW	kW	kW	mm	m^3/h	dB(A)	mm	mm	A	A	kg
GMV-W448WM/A-X	3Ph/380-415V/50/60Hz	44.8	50.0	3.9x2	4.0x2	(780×550×1000)×2	4.8x2	53	Φ12.7	Φ28.6	16.1x2	20x2	162×2
GMV-W504WM/A-X		50.4	56.5	3.9+5.7	4.0+5.4	(780×550×1000)×2	4.8+6.0	54	Φ15.9	Φ28.6	16.1+19.7	20x2	162×2
GMV-W560WM/A-X		56.0	63.0	7.9x2	5.4x2	(780×550×1000)×2	6.0x2	55	Φ15.9	Φ28.6	19.7x2	20x2	162×2
GMV-W615WM/A-X		61.5	69.0	5.7+7.9	5.4+7.35	(780×550×1000)×2	4.8x3	55	Φ15.9	Φ28.6	19.7+26.8	20+32	162×2
GMV-W670WM/A-X		67.0	75.0	7.9x2	7.35x2	(780×550×1000)×2	7.2x2	55	Φ15.9	Φ28.6	26.8x2	32x2	162×2
GMV-W728WM/A-X		72.8	81.5	3.9x2+5.7	4.0x2+5.4	(780×550×1000)×3	4.8x2+6.0	56	Φ19.1	Φ31.8	16.1x2+19.7	20x3	162×3
GMV-W784WM/A-X		78.4	88.0	3.9+5.7x2	4.0+5.4x2	(780×550×1000)×3	4.8+6.0x2	57	Φ19.1	Φ31.8	16.1+19.7x2	20x3	162×3
GMV-W840WM/A-X		84.0	94.5	5.7x3	5.4x3	(780×550×1000)×3	6.0x3	57	Φ19.1	Φ31.8	19.7x3	20x3	162×3
GMV-W895WM/A-X		89.5	100.5	5.7x2+7.9	5.4x2+7.35	(780×550×1000)×3	6.0x2+7.2	57	Φ19.1	Φ31.8	19.7x2+26.8	20x2+32	162×3
GMV-W950WM/A-X		95.0	106.5	5.7+7.9x2	5.4+7.35x2	(780×550×1000)×3	6.0+7.2x2	57	Φ19.1	Φ31.8	19.7+26.8x2	20+32x2	162×3
GMV-W1005WM/A-X		100.5	112.5	7.9x3	7.35x3	(780×550×1000)×3	7.2x3	57	Φ19.1	Φ38.1	26.8x3	32x3	162×3
GMV-W1064WM/A-X		106.4	119.5	3.9+5.7x3	4.0+5.4x3	(780×550×1000)×4	4.8+6.0x3	58	Φ19.1	Φ38.1	16.1+19.7x3	20x4	162×4
GMV-W1120WM/A-X		112.0	126.0	5.7x4	5.4x4	(780×550×1000)×4	6.0x4	59	Φ19.1	Φ38.1	19.7x4	20x4	162×4
GMV-W1175WM/A-X		117.5	132.0	5.7x3+7.9	5.4x3+7.35	(780×550×1000)×4	6.0x3+7.2	59	Φ19.1	Φ38.1	19.7x3+26.8	20x3+32	162×4
GMV-W1230WM/A-X		123.0	138.0	5.7x2+7.9x3	5.4x2+7.35x2	(780×550×1000)×4	6.0x2+7.2x2	59	Φ19.1	Φ38.1	19.7x2+26.8x2	20x2+32x2	162×4
GMV-W1285WM/A-X		128.5	144.0	5.7+7.9x3	5.4+7.35x3	(780×550×1000)×4	6.0+7.2x3	59	Φ19.1	Φ38.1	19.7+26.8x3	20+32x3	162×4
GMV-W1340WM/A-X		134.0	150.0	7.9x4	7.35x4	(780×550×1000)×4	7.2x4	59	Φ19.1	Φ38.1	26.8x4	32x4	162×4

208/230V,60Hz

Model	Power Supply	Capacity		Power Input		Dimension (W×D×H)	Water flow volume	Sound Pressure Level	Connecting		Min.circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating				Liquid	Gas			
	V/Ph/Hz	kW	kW	kW	kW	mm	m^3/h	dB(A)	mm	mm	A	A	kg
GMV-W448WM/A-F	208/230V~3Ph~60Hz	44.8	50.0	3.9x2	4.0x2	(780×550×1000)×2	4.8x2	53	Φ12.7	Φ28.6	32.3x2	50x2	162×2
GMV-W504WM/A-F		50.4	56.5	3.9+5.7	4.0+5.4	(780×550×1000)×2	4.8+6.0	54	Φ15.9	Φ28.6	32.3+34.2	50+60	162×2
GMV-W560WM/A-F		56.0	63.0	7.9x2	5.4x2	(780×550×1000)×2	6.0x2	55	Φ15.9	Φ28.6	34.2x2	60x2	162×2
GMV-W615WM/A-F		61.5	69.0	5.7+7.9	5.4+7.35	(780×550×1000)×2	4.8x3	55	Φ15.9	Φ28.6	34.2+45.1	60+80	162×2
GMV-W670WM/A-F		67.0	75.0	7.9x2	7.35x2	(780×550×1000)×2	7.2x2	55	Φ15.9	Φ28.6	45.1x2	80x2	162×2
GMV-W728WM/A-F		72.8	81.5	3.9x2+5.7	4.0x2+5.4	(780×550×1000)×3	4.8x2+6.0	56	Φ19.1	Φ31.8	32.3x2+34.2	50x2+60	162×3
GMV-W784WM/A-F		78.4	88.0	3.9+5.7x2	4.0+5.4x2	(780×550×1000)×3	4.8+6.0x2	57	Φ19.1	Φ31.8	32.3+34.2x2	50+60x2	162×3
GMV-W840WM/A-F		84.0	94.5	5.7x3	5.4x3	(780×550×1000)×3	6.0x3	57	Φ19.1	Φ31.8	34.2x3	60x3	162×3
GMV-W895WM/A-F		89.5	100.5	5.7x2+7.9	5.4x2+7.35	(780×550×1000)×3	6.0x2+7.2	57	Φ19.1	Φ31.8	34.2x2+45.1	60x2+80	162×3
GMV-W950WM/A-F		95.0	106.5	5.7+7.9x2	5.4+7.35x2	(780×550×1000)×3	6.0+7.2x2	57	Φ19.1	Φ31.8	34.2+45.1x2	60+80x2	162×3
GMV-W1005WM/A-F		100.5	112.5	7.9x3	7.35x3	(780×550×1000)×3	7.2x3	57	Φ19.1	Φ38.1	45.1x3	80x3	162×3
GMV-W1064WM/A-F		106.4	119.5	3.9+5.7x3	4.0+5.4x3	(780×550×1000)×4	4.8+6.0x3	58	Φ19.1	Φ38.1	32.3+34.2x3	50+60x3	162×4
GMV-W1120WM/A-F		112.0	126.0	5.7x4	5.4x4	(780×550×1000)×4	6.0x4	59	Φ19.1	Φ38.1	34.2x4	60x4	162×4
GMV-W1175WM/A-F		117.5	132.0	5.7x3+7.9	5.4x3+7.35	(780×550×1000)×4	6.0x3+7.2	59	Φ19.1	Φ38.1	34.2x3+45.1	60x3+80	162×4
GMV-W1230WM/A-F		123.0	138.0	5.7x2+7.9x2	5.4x2+7.35x2	(780×550×1000)×4	6.0x2+7.2x2	59	Φ19.1	Φ38.1	34.2x2+45.1x2	60x2+80x2	162×4
GMV-W1285WM/A-F		128.5	144.0	5.7+7.9x3	5.4+7.35x3	(780×550×1000)×4	6.0+7.2x3	59	Φ19.1	Φ38.1	34.2+45.1x3	60+80x3	162×4
GMV-W1340WM/A-F		134.0	150.0	7.9x4	7.35x4	(780×550×1000)×4	7.2x4	59	Φ19.1	Φ38.1	45.1x4	80x4	162×4