# MSH-GF SERIES



MSH-GE50/60/80VA

The unique product series: The perfect combination of cooling and heating capability. MSH-GF series, featuring Easy Clean Design and a highly effective Nano Platinum air purifying system, brings the most comfort to your room. Furthermore, the perfect combination of cooling and heating capability in a deluxe unit so much saves your investment expense.

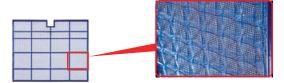
## Nano Platinum Filter



The filter incorporates nanometre-sized platinum-ceramic particles that generate stable antibacterial and deodourising effects.

The size of the three-dimensional surface has been increased as well, enlarging the filter capture area.

These features give the Nano Platinum Filter better dust collection performance than conventional filters. The superior air-cleaning effectiveness raises room comfort yet another level.



\* It is okay to wash the filter with water

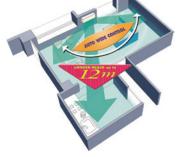
### Wide & Long Airflow (50-80)



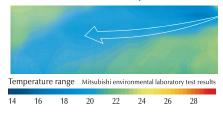
Bringing extra comfort to your life, left-right vane can be automatically controlled by remote controller. Simply use of Wide-vane mode, you can easily adjust direction of airflow to reach any corner of the room.

The high-power motor combines with a new designed "Long mode" to push air out further, provinding an extended airflow that can reach the far end of the long living rooms or reach the kitchen in open-concept living areas and studios. When operating in Long mode, the airflow can be

extended as far as 12 m.



#### $\vdash$ Air flow reaches up to 12m. $\dashv$

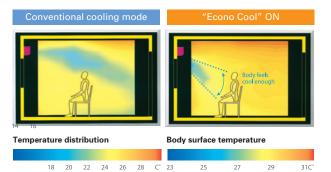


#### Econo Cool - smart save



The Econo Cool one touch operation automatically adjusts the direction of airflow based on the temperature at the air outlet. The set temperature can therefore be 2 °C above conventional temperature settings without loss of comfort and with a 20% increase in energy efficiency.

Ensures greater comfort even when the temperature setting is 2 °C above conventional settings.



Ensures more comfort even when the set temperature is 2°C higher than the conventional cooling mode.

	Conventional	Econo Cool	
Ambient temperature	35°C	35°C	
Set temperature	25°C	27°C	
Perceived temperature	30°C	29.3°C	

#### Heat Down to -10°C

The granted heating operation range has -10 °C as lower limit.

#### Cool up to +46°C

Cooling operation up to +46°C for all MSH-GF serie.



MSH-GF series SERIES SELECTION									
Indoor Unit	Outdoor Unit								
MSH-GF50/60/80VA	MUH-GF25/35/50VA								
Remote Controller									

# MSH-GF series

Туре				Fixed-Speed - Heat Pump					
Indoor Unit			MSH-GF25VA	MSH-GF35VA	MSH-GF50VA	MSH-GF60VA	MSH-GF80VA		
Outdoor Unit			MUH-GF25VA	MUH-GF35VA	MUH-GF50VA	MUH-GF60VA	MUH-GF80VA		
Refrigerant			R410A						
Power	Source			Outdoor Power Supply					
Supply	Outdoor (V / Phase / Hz)		230 V/ Single / 50						
	Capacity	Rated	kW	2,65	3,40	4,90	6,20	7,70	
Cooling		Min-Max	kW	-	-	-	-	-	
	Total Input	Rated	kW	0,82	1,07	1,77	2,00	2,80	
	EER		3,23	3,18	2,77	3,10	2,75		
	SPL	Indoor Unit (Low/High)	dBA	25 - 36	26 - 40	34 - 42	37 - 45	39 - 47	
	Capacity	Rated	kW	3,00	3,70	5,10	6,70	8,50	
		Min-Max	kW	-	-	-	-	-	
Heating	Total Input	Rated	kW	0,82	1,08	1,50	2,10	2,82	
	COP			3,66	3,43	3,40	3,19	3,01	
	SPL	Indoor Unit (Low/High)	dBA	25 - 36	26 - 40	37 - 45	34 - 45	37 - 47	
Operating Current (Cool) A			A	3,9	4,8	8,1	9,1	12,6	
Operating Current (Heat) A		A	3,9	5,0	6,9	9,5	12,7		
Indoor Unit	Dimensions	HxWxD	mm	295 - 798 - 232	295 - 798 - 232	325 - 1100 - 238	325 - 1100 - 238	325 - 1100 - 238	
	Weight		kg	9	9	16	16	16	
	Air Volume	Indoor Unit (High)	m <sup>3</sup> /min	7,9	8,8	14,1	16,7	18,7	
Outdoor Unit	Dimensions	HxWxD	mm	550 - 800 - 285	550 - 800 - 285	550 - 800 - 285	880 - 840 - 330	880 - 840 - 330	
	Weight kg		kg	33	39	40	67	76	
Ext. Piping	Diameter	Liquid/Gas	mm	6,35 / 9,52	6,35 / 9,52	6,35 / 12,7	6,35 / 15,88	9,52 / 15,88	
	Max. Length	Out-In	m	20	25	30	30	30	
	Max. Height	Out-In	m	10	10	10	10	15	
Guaranteed Operating Range (Outdoor DryBulb ) Heating		°C	21 ~ 46	21 ~ 46	21 ~ 46	21 ~ 46	21 ~ 46		
		Heating	°C	-10 ~ 24	-10 ~ 24	-10 ~ 24	-10 ~ 24	-10 ~ 24	