



# Samsung

## Air Conditioning

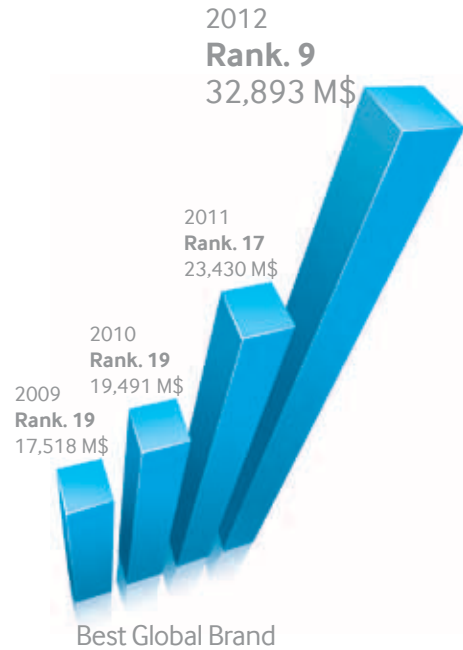
DVM S VRF AIR CONDITIONING



# SAMSUNG. MOVING FORWARD WITH OUR CUSTOMERS.

“Put simply, our differentiation is centered on producing innovative technology that brings genuine change to people’s lives. We do this by bringing a relentless focus on consumer experience and product innovation in everything we do.”

– Sue Shim CMO  
(Chief Marketing Officer), Samsung



## globally recognised. SAMSUNG AIR CONDITIONERS.



### Galeria de Innovacion 2009

Samsung attended Europe’s largest air conditioner exhibition “Climatisation” in Madrid, Spain. Samsung air conditioner’s beautiful design with innovative features was awarded the “Galeria de Innovacion”. The idea behind this award is to encourage innovation in the practical application of know-how and technologies in industrial development. Once again, Samsung proves its unsurpassed standards in quality.



### iF Product Design Award 2009

As one of the world’s oldest and prestigious design competitions, the iF product design award has stood for qualitatively outstanding design awards for over 50 years. And Samsung air conditioner with its design innovations has won the iF product design award for the year 2009. Samsung air conditioner continues to receive worldwide recognition and awards, proving high quality of function and beauty.



### Comfort & Design 2010

Organised by Fiera Milano International, 37th Mostra Convegno Expocomfort / Expobagno 2010 aimed to reward the best product that shows a high level of environmental quality, providing a complete overview of the sector along the lines of “Comfort & Living Technology”. And Samsung air conditioner won the prize conferring a valid and professional recognition for the best product in the ceremony.



### Good Design Award 2011

Good Design Award is a comprehensive programme for the evaluation and encouragement of design organised by Japan Institute of Design Promotion (JDP). This has been a programme advancing lifestyle and industrial activity by selecting outstanding design. Samsung air conditioner, Y series, has advanced to the finals for the year 2011.



## ECO-FRIENDLY. SAMSUNG.

### PRESERVATION FOR FUTURE GENERATIONS

Thinking of people and the environment, Samsung has been developing products/solutions that are eco-friendly without sacrificing performance. Realizing hopes for a greener, healthier life for people and the generations that follow, Samsung's environment-friendly technologies work to make the world a safer and more liveable place.

#### **Samsung Eco-Friendly Air Conditioner**

Making continuous efforts to stay eco-friendly, Samsung air conditioners use R-410A, an environment-friendly refrigerant to help rid the air of pollutants and restrain the use of materials with high global warming potential(GWP). These energy-efficient air conditioners not only save you money, but help conserve the environment.

#### **Air and Water Conservation**

As a leading innovator of environment-friendly products and technologies, Samsung products already drastically reduce the strains on nature's valuable resources. Samsung uses cyclopentane insulation in its refrigerators not to promote greenhouse effect and thus to prevent global warming. Samsung's water-efficient washing machines also effectively operate with less detergent and water to conserve nature.

#### **Use Less, Save More**

Samsung washers use less power with ceramic heaters, and ultimately save energy consumption and total operation costs. This energy-efficient technology also protects the environment to accommodate the 'go green' trend.

#### **Global Recycling**

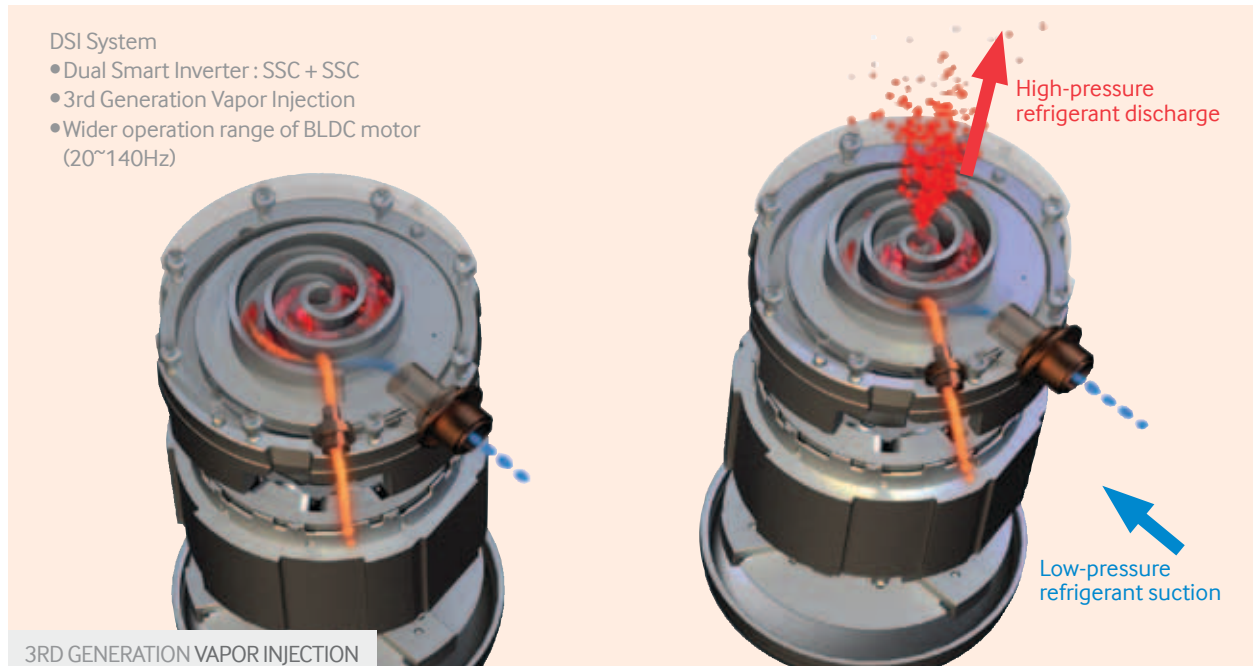
Samsung Electronics has taken a leading role in saving the environment and complies with the WEEE (Waste Electrical and Electronic Equipment) Directive by joining or establishing the recycling schemes for each country.

# DVM S DIGITAL VARIABLE MULTI | SMART EFFICIENCY

DVM S is a highly innovative system that adopts the new 3rd generation SSC (Samsung Scroll Compressor) technology. With its Dual Smart Inverter, DVM S provides the world-class leading energy efficiency and the most powerful cooling and heating performance. This is a perfect air conditioning system that satisfies all variable environments including large buildings.

## DSI (Dual Smart Inverter) System

The 3rd generation innovative system, Dual Smart Inverter, adopts a dual inverter compressor that upgrades refrigerant flow and the motor's operating performance. This unique Dual Smart Inverter achieves unsurpassed energy efficiency.

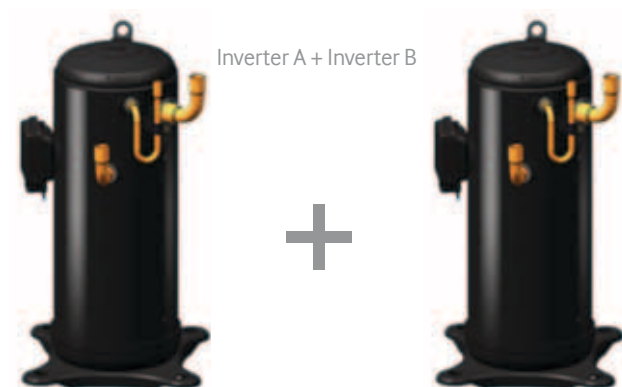


## Dual Smart Inverter

The Innovative Dual Smart Inverter has both compressors operate simultaneously, and it provides balanced oil distribution, quick cooling and heating, and better energy efficiency.

### DUAL SMART INVERTER

- Simultaneous operation
- Balanced oil distribution
- Quick cooling and heating
- Higher efficiency



# HIGH EFFICIENCY

To meet worldwide customer needs, Samsung continues to develop optimised air conditioners which offer high quality performance and great energy efficiency.

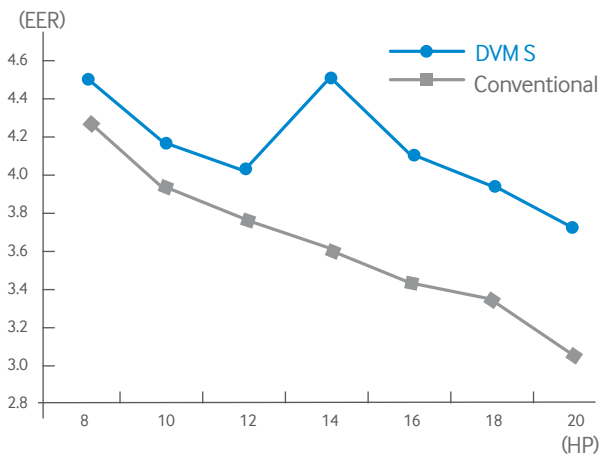
## Class Leading Energy Efficiency

DVM S has achieved a class-leading COP of 4.94 by adopting an inverter compressor with vapor injection system. Therefore, it gives you powerful, quick cooling and heating with minimum energy consumption.



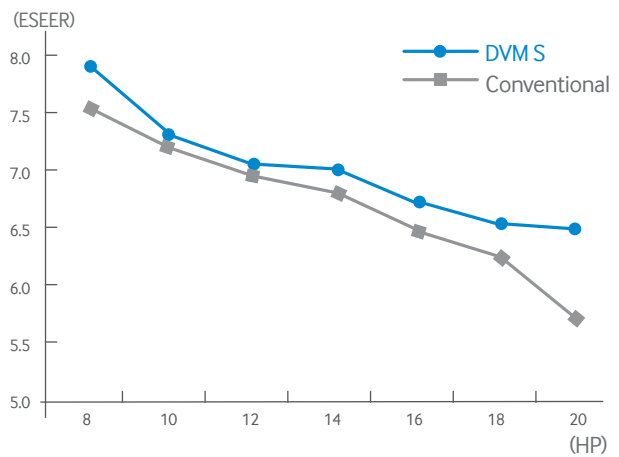
## EER (Energy Efficiency Ratio)

DVM S has achieved superior EER which far surpasses conventional systems EER at all ranges. On average, DVM S has 13% higher EER than conventional systems.



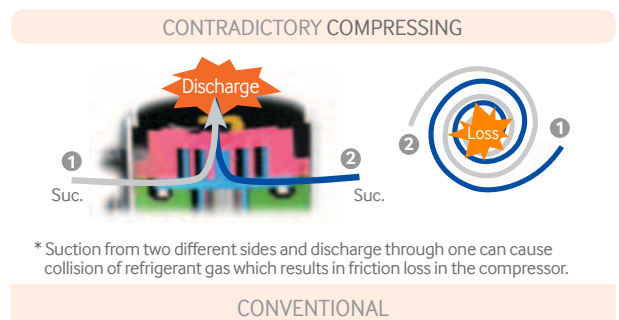
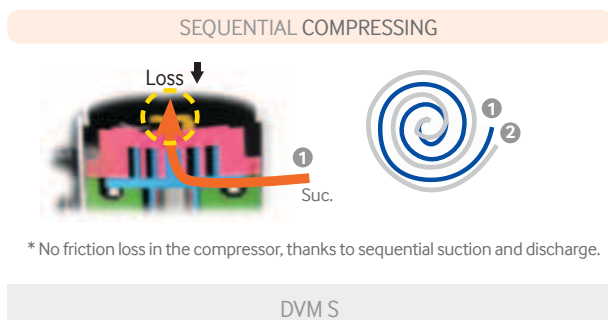
## ESEER (European Seasonal Energy Efficiency Ratio)

DVM S's ESEER also surpasses conventional systems ESEER at all ranges. On average, it has 4% higher rate than conventional systems.



## Asymmetric Scroll Design

Applying fluid dynamic design, DVM S minimizes compression loss during the compression of refrigerant.

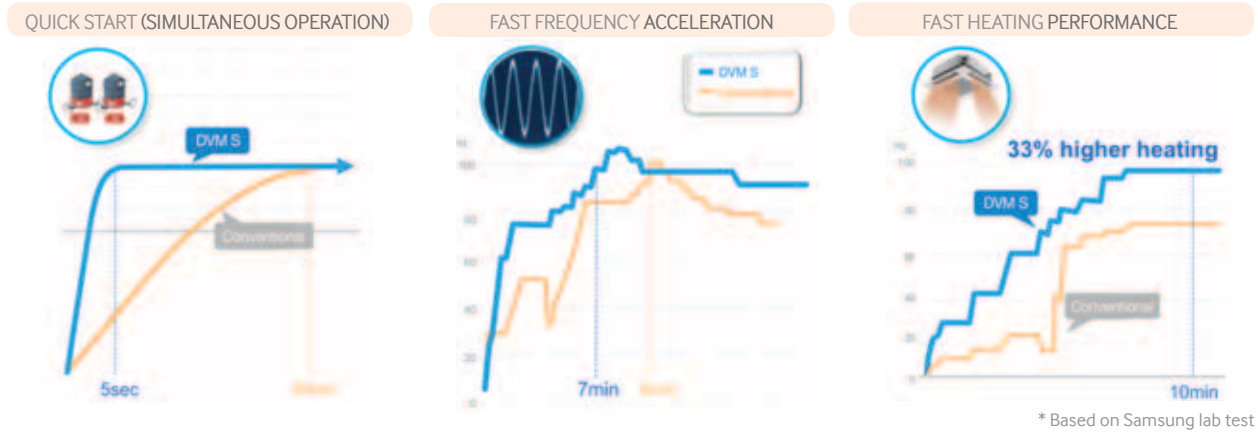


# INNOVATIVE TECHNOLOGY

Samsung is dedicated to supporting comfortable living based on the strength of its technologies. Rely on Samsung air conditioners not only to provide convenience but also to enrich your life.

## Quick Cooling and Heating

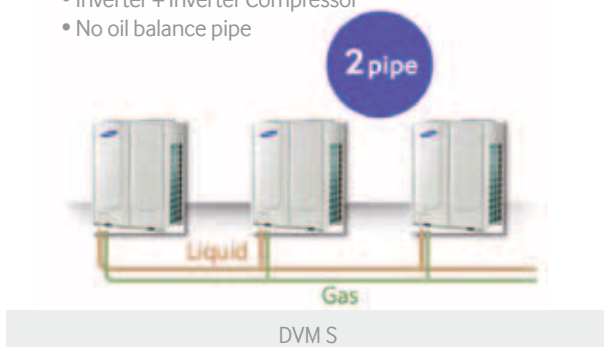
With compressor speed acceleration and simultaneous starting, DVM S provides quick cooling and heating performance.



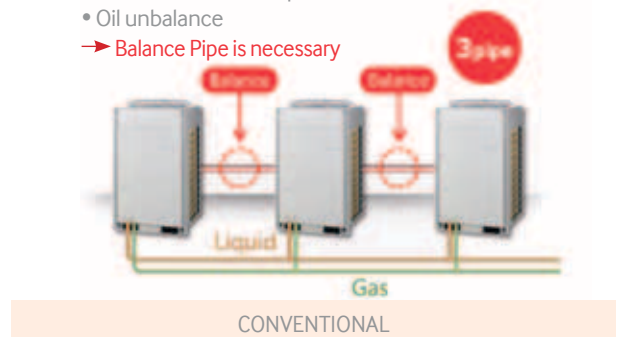
## Auto Oil Balancing

Samsung DVM S ensures stable and equal oil balancing without requiring an extra oil balancing pipe.

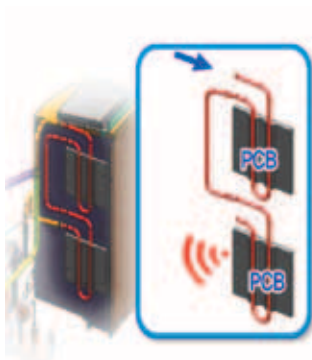
- Inverter + Inverter Compressor
- No oil balance pipe



- Fixed + Inverter Compressor
- Oil unbalance
- Balance Pipe is necessary



DVM S REFRIGERANT COOLING METHOD



CONVENTIONAL AIR COOLING METHOD



## PCB Refrigerant Cooling System

By utilising a small amount of refrigerant to cool the PCBs, DVM S ensures better stability than conventional air cooling.

# SMART MANAGEMENT

Samsung provides an easy to use, smart management system that makes life simpler. With this web-based system, you can immediately access data and easily manage it for unsurpassed convenience.

## Auto Commissioning and Management (ACM)

DVM S has a smart management system that facilitates self-diagnosis, auto commissioning, auto management, and mobile data transmission. Since you can control the system with smart phone or tablet PC, it provides easy and convenient management.



## Reduced Commissioning Time

Thanks to ACM, the commissioning time for DVM S has shortened considerably from 180 minutes to 50 minutes, and the testing results are automatically stored and reported.



## Wifi Monitoring System

With S-Checker, DVM S can be monitored by smart devices such as smart phone or tablet PC.

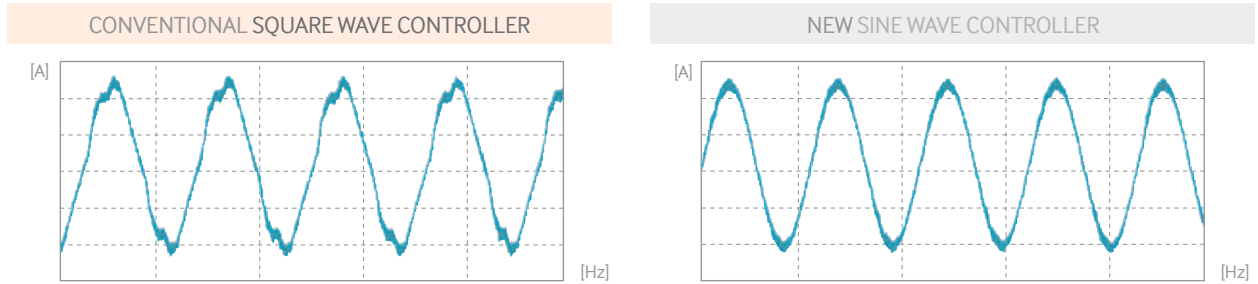


# FLEXIBLE INSTALLATION

Compact in design with extended piping length, Samsung air conditioner facilitates easy installation for any type of space from high-rise buildings to small commercial places.

## Adaptive Sine Wave Control

Adaptive sine wave control can reduce THP (Total Harmonic Distortion). Therefore DVM S doesn't need to use shield wiring for communication.



## Longest Piping Length and Highest Elevation

Samsung DVM S allows extended piping length of up to 200m (220m equivalent piping), and units will still give a great performance over wide areas. With this technology, installation is available with a maximum height level of 110m, which is equivalent to 20 stories (each story is considered 5m high).





# COMFORTABLE AND RELIABLE OPERATION

Samsung air conditioners ensure comfortable and reliable operation with powerful cooling and heating performance and auto temperature adjustment system.

## Corrosion and Frost Resistant

The hydrophilic coating facilitates efficient heat exchange and delays the onset of frost formation to provide consistent heating performance. An anti-corrosive coating also helps units to resist corrosion from the elements.

- Corrosion resistant with epoxy acrylic coating.
- Implemented corrosion resistant through acrylic+surfactant.



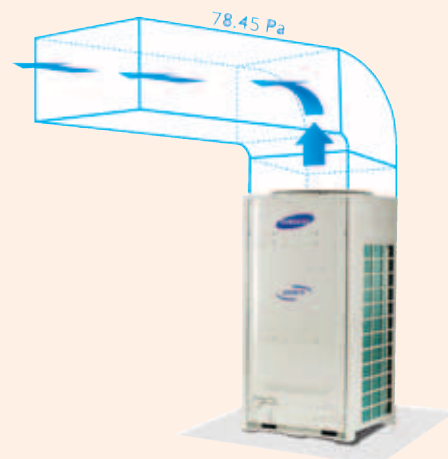
## Non-stop Heating Operation

DVM S can continuously operate in heating mode with rotational defrost operation. Since the heating mode continues for a longer of time, you can stay warm and comfortable.



## High External Static Pressure

To properly deal with unexpected and varying installation conditions, DVM S is designed to manage high external static pressures up to 78.45 Pa.





# DVM S DIGITAL VARIABLE MULTI | LINEUP – INDOOR UNITS

Industry leaders. Our figures speak for themselves.



## DVM S HP / HR

DVM S outdoors are available in two configurations: a 2-pipe Heat Pump (HP) or a 3-pipe Heat Recovery (HR).

IMAGE	MODEL	CAPACITY	HP	SINGLE								
				8	10	12	14	16	18	20	22	
				Cooling	22.4kW	28.0kW	33.6kW	40.0kW	45.0kW	50.4kW	56.0kW	61.6kW
				EER	4.48	4.12	4.00	4.49	4.09	3.91	3.69	3.55
			COP	4.94	4.70	4.34	4.74	4.35	4.76	4.53	4.15	
	AM080FXVAGH/GR	8 HP		1								
	AM100FXVAGH/GR	10 HP			1							
	AM120FXVAGH/GR	12 HP				1						
	AM140FXVAGH/GR	14 HP					1					
	AM160FXVAGH/GR	16 HP						1				
	AM180FXVAGH/GR	18 HP							1			
	AM200FXVAGH/GR	20 HP								1		
	AM220FXVAGH/GR	22 HP									1	

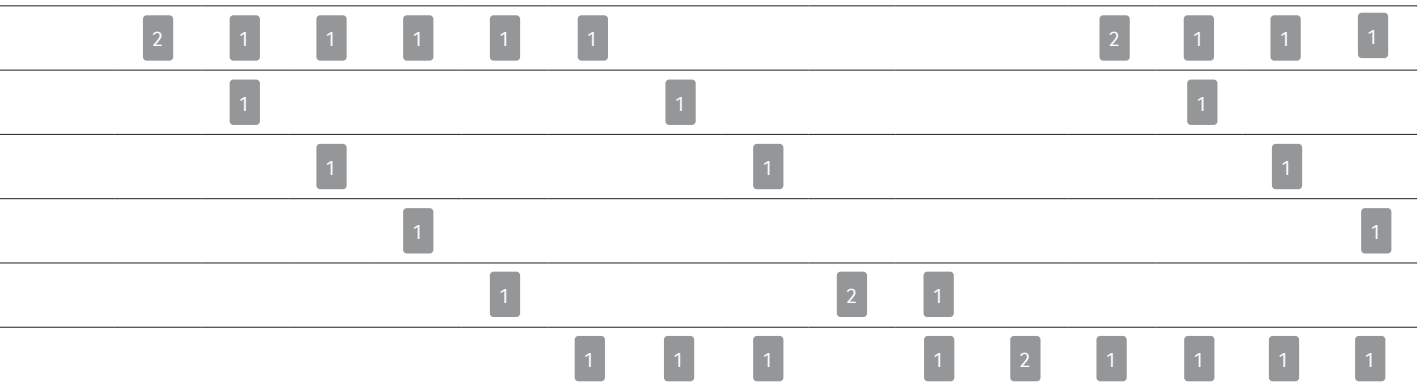
\* If you wish to install outdoor unit module with capacity over 66 HP, please contact local Samsung Dealer.

## DVM S HP / HR

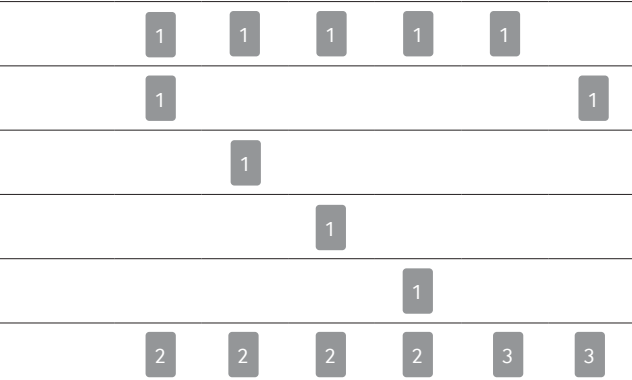
IMAGE	MODEL	CAPACITY	HP	SINGLE								
				54	56	58	60	62	64	66	68	
				Cooling	151.2kW	156.8kW	163.2kW	168.2kW	173.6kW	179.2kW	184.8kW	190.4kW
				EER	3.69	3.64	3.74	3.68	3.64	3.59	3.55	3.70
			COP	4.33	4.19	4.28	4.20	4.39	4.26	4.15	4.22	
	AM080FXVAGH/GR	8 HP										
	AM100FXVAGH/GR	10 HP										
	AM120FXVAGH/GR	12 HP		1	1						2	
	AM140FXVAGH/GR	14 HP				1						
	AM160FXVAGH/GR	16 HP					1					
	AM180FXVAGH/GR	18 HP										
	AM200FXVAGH/GR	20 HP		1				2	1			
	AM220FXVAGH/GR	22 HP		1	2	2	2	1	2	3	2	

\* If you wish to install outdoor unit module with capacity over 66 HP, please contact local Samsung Dealer.

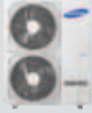
MODULE														
24	26	28	30	32	34	36	38	40	42	44	46	48	50	52
67.2kW	73.6kW	78.6kW	84.0kW	89.6kW	95.2kW	101.6kW	106.6kW	112.0kW	117.6kW	123.2kW	128.8kW	135.2kW	140.2kW	145.6kW
4.00	4.25	4.05	3.95	3.80	3.70	3.87	3.76	3.69	3.61	3.55	3.77	3.90	3.81	3.77
4.34	4.55	4.35	4.59	4.46	4.22	4.36	4.23	4.53	4.32	4.15	4.25	4.36	4.26	4.39



MODULE					
70	72	74	76	78	80
196.8kW	201.8kW	207.2kW	212.8kW	218.4kW	224.8kW
3.78	3.73	3.70	3.65	3.61	3.69
4.29	4.22	4.32	4.28	4.18	4.24



### DVM S Eco

IMAGE	CAPACITY PHASE	HP	4HP	5HP	6HP
		Cooling	11.2kW	14.0kW	15.5kW
		EER	4.18	3.80	3.60
		COP	4.46	4.43	4.10
	1 Phase		●	●	●
	3 Phase		●	●	●

# DVM S DIGITAL VARIABLE MULTI | LINEUP – INDOOR UNITS

Our large portfolio of indoor unit model styles, in varying capacities, provide flexible solutions for all types of applications.

## Cassette



MODEL	CAPACITY (kW)	4Way Cassette S AM...FN4DEH	4Way Mini AM...FNNDEH	Slim 1Way AM...FN1DEH	2Way AM...FN2DEH
022	2.2kW		•	•	
028	2.8kW		•	•	
036	3.6kW		•	•	
045	4.5kW	•	•		
056	5.6kW	•	•		•
060	6.0kW		•		
071	7.1kW	•			•
090	9.0kW	•			
112	11.2kW	•			
128	12.8kW	•			
140	14.0kW	•			
FEATURES	Powerful Airflow	•	•	•	
	Ceiling Dust Prevention	•	•	•	
	Fresh Air Intake	•	•		
	High Lift-up Drain Pump	•	•	•	•
	Sub Duct	•	•		

## Ducted





MODEL	CAPACITY (kW)	HSP AM...FNHDEH	MSP AM...FNMDEH	Slim AM...FNLDEH
017	1.7kW			•
022	2.2kW		•	•
028	2.8kW		•	•
036	3.6kW		•	•
045	4.5kW		•	•
056	5.6kW		•	•
071	7.1kW		•	•
090	9.0kW		•	•
112	11.2kW	•	•	•
128	12.8kW	•	•	•
140	14.0kW	•	•	•
220	22.0kW	•		
280	28.0kW	•		
FEATURES	Pre Filter	•	•	•
	Easy Filter Cleaning	•	•	•
	High Lift-up Drain Pump	•	•	•
	Smart Pressure Control	•	•	•

# DVM S DIGITAL VARIABLE MULTI | LINEUP – INDOOR UNITS






## Wall-mounted



MODEL	CAPACITY (kW)	Neo Forte AM...FNTDEH	Neo Forte-E AM...FNQDEH
022	2.2kW	●	●
028	2.8kW	●	●
036	3.6kW	●	●
045	4.5kW	●	●
056	5.6kW	●	●
071	7.1kW	●	●
FEATURES	 Deodorising Filter	●	●
	 good' sleep	●	●

## Console and Ceiling



MODEL	CAPACITY (kW)	Console AM...FNJDEH	Ceiling AM...FNCDEH
028	2.8kW	●	
036	3.6kW	●	
056	5.6kW	●	●
071	7.1kW		●
FEATURES	 Virus Doctor	●	
	 Interior Design	●	●
	 Anti-virus Filter	●	●
	 Lightweight Unit	●	●
	 Flexible Pipe Installation	●	●

## Concealed Floor Standing



MODEL	CAPACITY (kW)	AM...FNFDEH
036	3.6kW	●
056	5.6kW	●
071	7.1kW	●

# CONTROL SYSTEM STRUCTURE. CONVENIENT MANAGEMENT.

## Integrated Management

Enabling convenient and optimized management, Samsung's integrated management system is a perfect choice for managing large and middle-sized buildings with many indoor and outdoor units.

## System Controller

Samsung's control system offers various control options for the indoor units. You can control the multiple units individually or simultaneously in groups to optimize your convenience.

## Building Management

This excellent building management system with convenient monitoring makes management of your air conditioning units much easier and economical.

## Applications

Samsung System Air Conditioner's various products are designed so that you can find the most convenient and efficient air conditioning system to perfectly suit your needs.



### S-NET 3

This integrated software connects to the internet to control the system air conditioners through DMS from a single computer.



### S-NET Mini

Featuring a touch screen, S-NET Mini can be directly connected to the system air conditioners through centralised controllers or interface modules.



### DMS 2

DMS 2 is an internet-based management device that stores and manages all the data relevant to the system air conditioner.



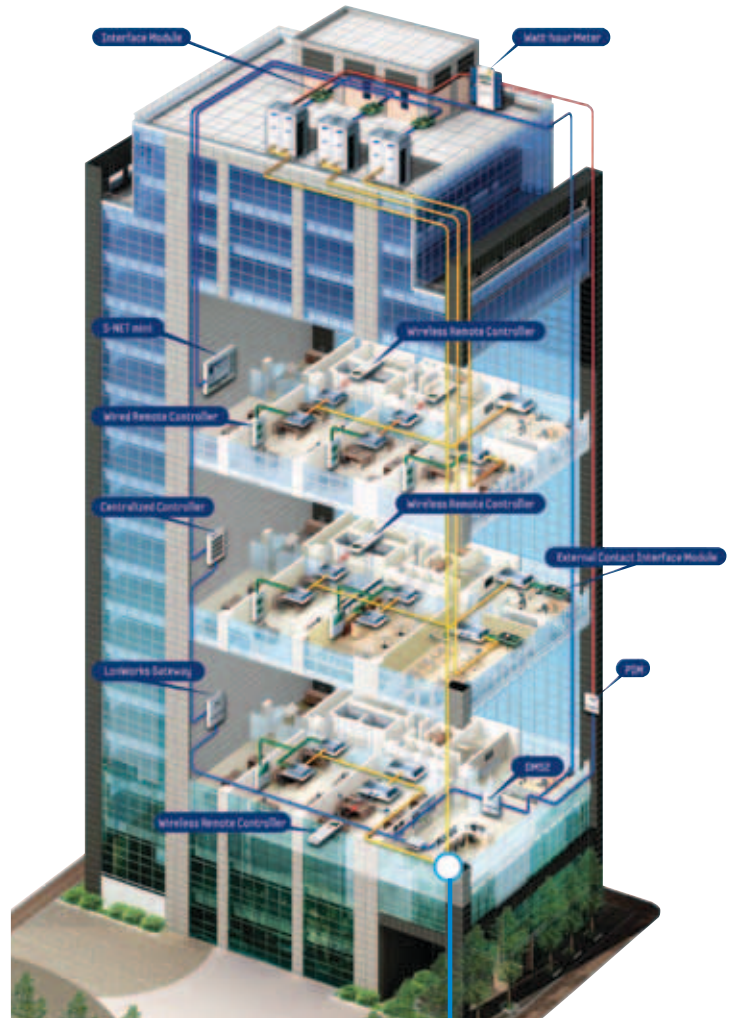
### Centralised Controller

The centralised controller controls the system air conditioners individually or in groups supporting many other functions.



### Wired R/C , Wireless R/C

The individual remote controllers are used to control single indoor units conveniently.



Remote Control

Internet



## IT'S ALL TAKEN CARE OF.

Just because the world economy is complicated, doesn't mean firms have to run that way. Samsung's smart technology provides a successful solution for a carefree business environment. Enjoy instant coolness, user-friendly installation, advanced control, and smart and efficient use of energy. All taken care of, so business can move forward.

## FIND OUT MORE

To learn more about Samsung Air Conditioning, please visit:  
[www.dvmsystem.com](http://www.dvmsystem.com)



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