



# SAMSUNG AR80 Inverter air conditioner

The new Samsung AR80 delivers powerful, personalised cooling with AI Auto Cooling, Motion Detect Sensor, and AI WindFree™ for fast, draft-free comfort.

Its PM 1.0 Filter helps keep air ultra-clean, while SmartThings connectivity offers easy control and intelligent modes for every lifestyle. With Freeze Wash cleaning, R32 refrigerant, and a high-efficiency twin compressor, it's built for comfort, efficiency, and reliability.



## Product Features:

- PM 1.0 Filter
- SmartThings
- AI Auto Cooling
- Motion Detect Sensor
- Freeze Wash
- Fast & Comfort AI WindFree™
- Dry Comfort
- Good Sleep

- R32 Refrigerant
- New Slim Outdoor Design
- Outdoor Unit - Twin Compressor with High Efficiency Fan
- AI Inverter & AI Energy Efficiency
- AI Diagnosis



**SAMSUNG**

Smart Airconditioning Solutions



Product		AR80	AR80	AR80	
Model Code		AR80F12CADW/FA	AR80F18CADW/FA	AR80F24CADW/FA	
	Capacity (Cooling, Btu/hr)	11942 Btu/hr	17061 Btu/hr	22179 Btu/hr	
	Capacity (Heating, Btu/hr)	12966 Btu/hr	20473 Btu/hr	23544 Btu/hr	
	Capacity (Cooling, Min - Max, Btu/hr)	3583 - 13649 Btu/hr	5118 - 23203 Btu/hr	4913 - 26956 Btu/hr	
	Capacity (Heating, Min - Max, Btu/hr)	2218 - 17061 Btu/hr	3992 - 25591 Btu/hr	4504 - 30368 Btu/hr	
	Capacity (Cooling, kW)	3.50 kW	5.00 kW	6.50 kW	
	Capacity (Heating, kW)	3.80 kW	6.00 kW	6.90 kW	
	Capacity (Cooling, Min - Max, kW)	1.05 - 4 kW	1.5 - 6.8 kW	1.44 - 7.9 kW	
Energy Efficiency	Capacity (Heating, Min - Max, kW)	0.65 - 5 kW	1.17 - 7.5 kW	1.32 - 8.9 kW	
	EER (Cooling, W/W)	3.21 W/W	3.41 W/W	3.32 W/W	
	COP (Heating, W/W)	3.41 W/W	3.43 W/W	3.45 W/W	
	EER (Cooling, Btu/hW)	10.96 Btu/hW	11.65 Btu/hW	11.32 Btu/hW	
	COP (Heating, Btu/hW)	11.63 Btu/hW	11.70 Btu/hW	11.77 Btu/hW	
Noise Level	Energy Efficiency Class for cooling (Grade)	C : A, H : A+	C : A+, H : A+	C : A, H : A+	
	Noise Level (Indoor, High/Low, dBA)	38/22 dBA	43/25 dBA	44/28 dBA	
Noise Level	Noise Level (Outdoor, High/Low, dBA)	46 dBA	51 dBA	54 dBA	
	Power Source(Φ/V/Hz)	1 / 220~240~ / 50	1 / 220~240~ / 50	1 / 220~240~ / 50	
	Power Consumption(Cooling, W)	1090 W	1465 W	1960 W	
	Power Consumption(Heating, W)	1115 W	1750 W	2000 W	
	Operating Current(Cooling, A)	5.0 A	6.5 A	8.8 A	
Electrical Data	Operating Current(Heating, A)	4.5 A	7.8 A	8.8 A	
	Gross Dimension (Indoor, WxHxD, mm*mm*mm)	880*290*375 mm	1115*290*375 mm	1115*290*375 mm	
	Gross Dimension (Outdoor, WxHxD, mm*mm*mm)	834*620*323 mm	913*622*371 mm	1023*724*413 mm	
	Net Dimension (Indoor, WxHxD, mm*mm*mm)	820*299*215 mm	1055*299*215 mm	1055*299*215 mm	
	Net Dimension (Outdoor, WxHxD, mm*mm*mm)	710*540*220 mm	790*548*285 mm	880*638*310 mm	
	Gross Weight (Indoor, kg)	11.5 kg	14.7 kg	14.7 kg	
	Gross Weight (Outdoor, kg)	26.3 kg	31.5 kg	41.1 kg	
	Net Weight (Indoor, kg)	10.1 kg	13.1 kg	13.1 kg	
	Net Weight (Outdoor, kg)	24.5 kg	29.7 kg	38.6 kg	
	Physical specification	Loading Quantity (20/40/40Hft without Pipe)	105 / 212 / 252	80 / 168 / 198	65 / 138 / 154
Piping Length (Max, m)		15 m	30 m	30 m	
Piping Height (Max, m)		8 m	15 m	15 m	
SVC Valve (Liquid (ODxL))		6.35	6.35	6.35	
SVC Valve (Gas (ODxL))		9.52	12.7	15.88	
Moisture Removal (l/hr)		1.39 l/hr	1.93 l/hr	2.30 l/hr	
Air Circulation (Cooling, m/min)		11.20 m/min	16.00 m/min	15.40 m/min	
Refrigerant (Type)		R32	R32	R32	
Refrigerant (Charging, kg)		0.7 kg	0.97 kg	1.15 kg	
Refrigerant (Charging, tCO2e)		0.47 tCO2e	0.65 tCO2e	0.78 tCO2e	
Low Ambient (Cooling, °C)		-10~46 °C	-10~46 °C	-10~46 °C	
Low Ambient (Heating, °C)		-15~24 °C	-15~24 °C	-15~24 °C	
Outdoor Unit (Compressor Type)		BLDC	BLDC	BLDC	
Air Flow		Outdoor Unit (Anti-Corrosion Fin)	Yes	Yes	Yes
		WindFree Cooling	Yes	Yes	Yes
	Air Direction Control (Up/Down)	Auto	Auto	Auto	
	Air Direction Control (Left/Right)	Auto	Auto	Auto	
Air Purification	Air Flow Control Step (Cool/Fan)	5/4	5/4	5/4	
	PM1.0 Filter	Yes	Yes	Yes	
	4-in-1 Care Filter	No	No	No	
Convenience	Copper Anti-bacterial Filter	No	No	No	
	Auto Clean (Self Cleaning)	Yes	Yes	Yes	
	SmartThings	Yes	Yes	Yes	
	AI Auto Cooling	Yes	Yes	Yes	
	Motion Detect Sensor	Yes	Yes	Yes	
	Freeze Wash	Yes	Yes	Yes	
	Filter Cleaning Indicator	Yes	Yes	Yes	
	Indoor Temp. Display	Yes	Yes	Yes	
	Display On/Off	Yes	Yes	Yes	
	Beep On/Off	Yes	Yes	Yes	
	24-Hour Timer	Yes	Yes	Yes	
	Auto Changeover	Yes	Yes	Yes	
	Operating Mode	Auto Restart	Yes	Yes	Yes
Auto Mode		Yes	Yes	Yes	
Fast Cool		Yes	Yes	Yes	
Dry Comfort		Yes	Yes	Yes	
Good Sleep		Yes	Yes	Yes	
Eco Mode		Yes	Yes	Yes	
Dehumidification		Yes	Yes	Yes	
Fan Mode		Yes	Yes	Yes	
Smart	Quiet	Yes	Yes	Yes	
App Connectivity	WiFi Embedded	Yes	Yes	Yes	
	SmartThings App Support	Yes	Yes	Yes	

