



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

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
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
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
	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