

TOSHIBA

POLAR

Air source heat pump
for Nordic conditions



 **Better Air Solutions**

POLAR

ENERGY CLASS A+++

POLAR has been designed to provide optimal comfort in A+++ heating and to achieve excellent energy savings.



Excellent comfort all the way down to -25°C

Polar offers versatile functions that ensure complete comfort even in the most difficult conditions. Its year-round efficiency will keep you warm and comfortable even when it is -25°C outside!

Absolute **silence**

Toshiba is constantly developing innovations to ensure state-of-the-art air conditioning complying with the users' expectations. For lower sound level and improved comfort, Polar's Silent function halves the sound volume of the outdoor unit and also reduces the sound level of the indoor unit, giving you a good night's sleep.

Excellent performance for the best savings

Energy efficiency class A+++ in case of heating and A++ in case of cooling guarantees optimal performance. Polar is available in sizes 25 and 35, depending on the site's power demand.

Ready for installation

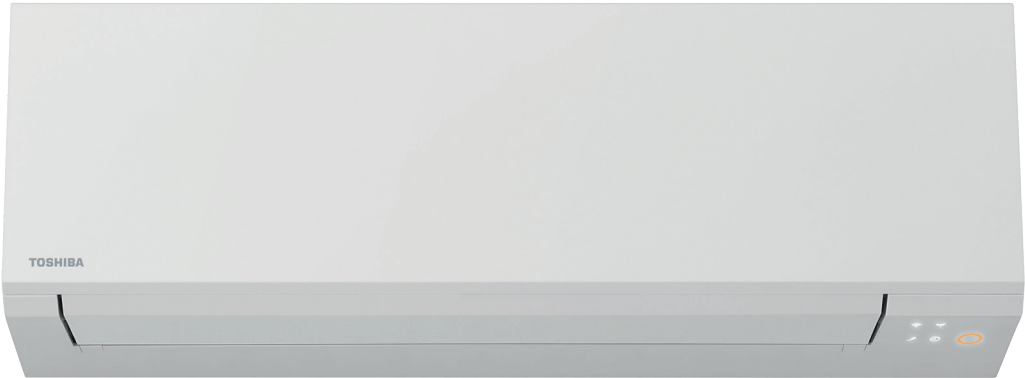
Installation of the indoor unit is quick and its appearance neat owing to the concealed piping penetrations.

Guaranteed heat regardless of conditions

Toshiba's unique manual defrost on-Demand function ensures that the device can be used even in extreme conditions by de-icing of the outdoor unit with a press on a button on the remote control.



POLAR DESIGN



Inner
beauty

Enjoy the comfort of living with a new stylish and modern air source heat pump with Scandinavian lines, a matte look and invisible piping penetrations.



PAMPER YOURSELF WITH QUALITY

Design and reliability

Innovation, efficiency, high reliability, energy saving, respect for the environment... These powerful values are at the core of everything we do at Toshiba. For more than 50 years, Toshiba has been offering its customers the proven accuracy and expertise of flawless Japanese quality



Toshiba's innovative inverter technology

Toshiba's innovative rotary compressor technology combines exemplary performance with excellent reliability. It boosts efficiency and eliminates the risk of occasional noise by minimising thermal fluctuations to ensure a constant temperature. With Toshiba's inverter technology, POLAR can continuously adjust the heating and cooling capacity by regulating the compressor speed as required.



INVERTER TECHNOLOGY DESIGNED BY TOSHIBA

SCOP up to 5.1	SEER up to 7.0	Heating function all the way down to -25°C
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Heating power at -15°C: 4.0kW
Heating power at -20°C: 3.3kW

ABSOLUTE SILENCE

Toshiba's innovation guarantees a top-class air source heat pump for the users. The Polar outdoor unit is among the quietest on the market and the indoor unit's silent function reduces the sound level generated by the indoor unit to ensure you sleep well.



Ultra-silent system
Under
19dB(A)



Comfort of living



Silent function
Under
39dB(A)

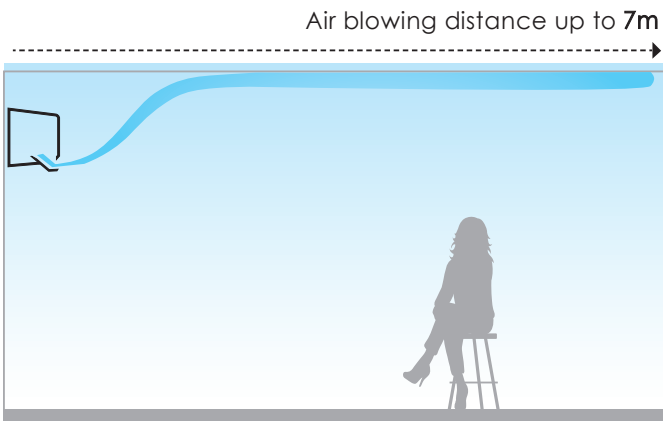
Unique outdoor unit
sound suppression

Using the unique POLAR Silent mode, the user can lower the sound level of the outdoor unit by 6dB(A) to ensure peaceful sleep in the neighbourhood.

INNOVATIVE WELL-BEING

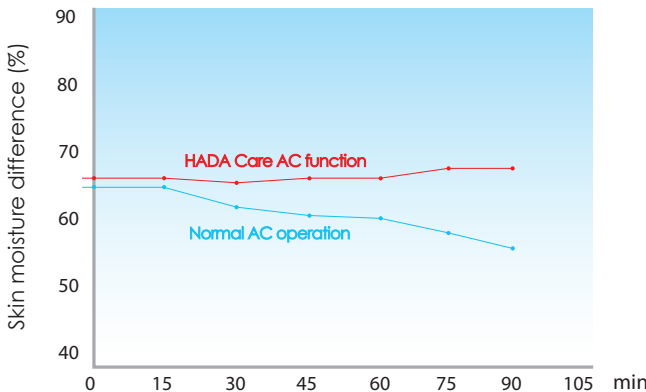
HADA air control (in cooling)

- The Toshiba HADA function maintains more even air humidity, making your skin feel better.
- Air control blows cool air to the ceiling level, avoiding direct airflow to the skin and ensuring a more balanced room temperature.



Test room length >10m*

Skin moisture transfer in case of a working air conditioner



SOLUTION FOR WELL-BEING



The Toshiba air source heat pump has been designed to maximize your comfort and offers remote control features making your daily life more comfortable.

FROST PROTECTION HEATING

Protects your real estate and belongings from freezing when you are away. The perfect solution for winter conditions.

FIREPLACE MODE

Toshiba's unique fireplace mode allows distribution of heat from a fireplace or other external heat source by keeping the indoor unit's fan running even if the outdoor unit has stopped because the desired temperature has been reached.

MANUAL DEFROST

Under certain extreme conditions, defrosting can be performed manually at any time by pressing the Set button for five seconds.

COMFORTABLE SLEEP MODE

For the best comfort during sleep, set the temperature to rise by 1°C after 1 hour, then by one more degree after 2 hours, and the temperature reached will be maintained until morning.

SILENT MODE (outdoor unit)

Toshiba's unique outdoor unit noise level suppression function lowers the sound level even by 6dB(A) to the delight of your neighbourhood.

SILENT MODE (indoor unit)

Press the Fan button to adjust the speed and activate the silent mode for a quiet sound level.

WEEKLY TIMER

Using the weekly timer, the ON and OFF times or program settings can be set for 24-hour periods. 4 different settings per day and 7 different programs per week.

HADA CARE

Set the grille position to produce indirect airflow with better air distribution for equalizing the room temperature.

WIRELESS WIFI as an option

Through integration of a wireless controller, you can control your air source heat pump using a smartphone.

The Toshiba remote controller features include preset functions, power selection and ECO for energy cost savings, comfortable sleep to optimize room temperature at night, and Hi-power for extremely fast cooling or heating.

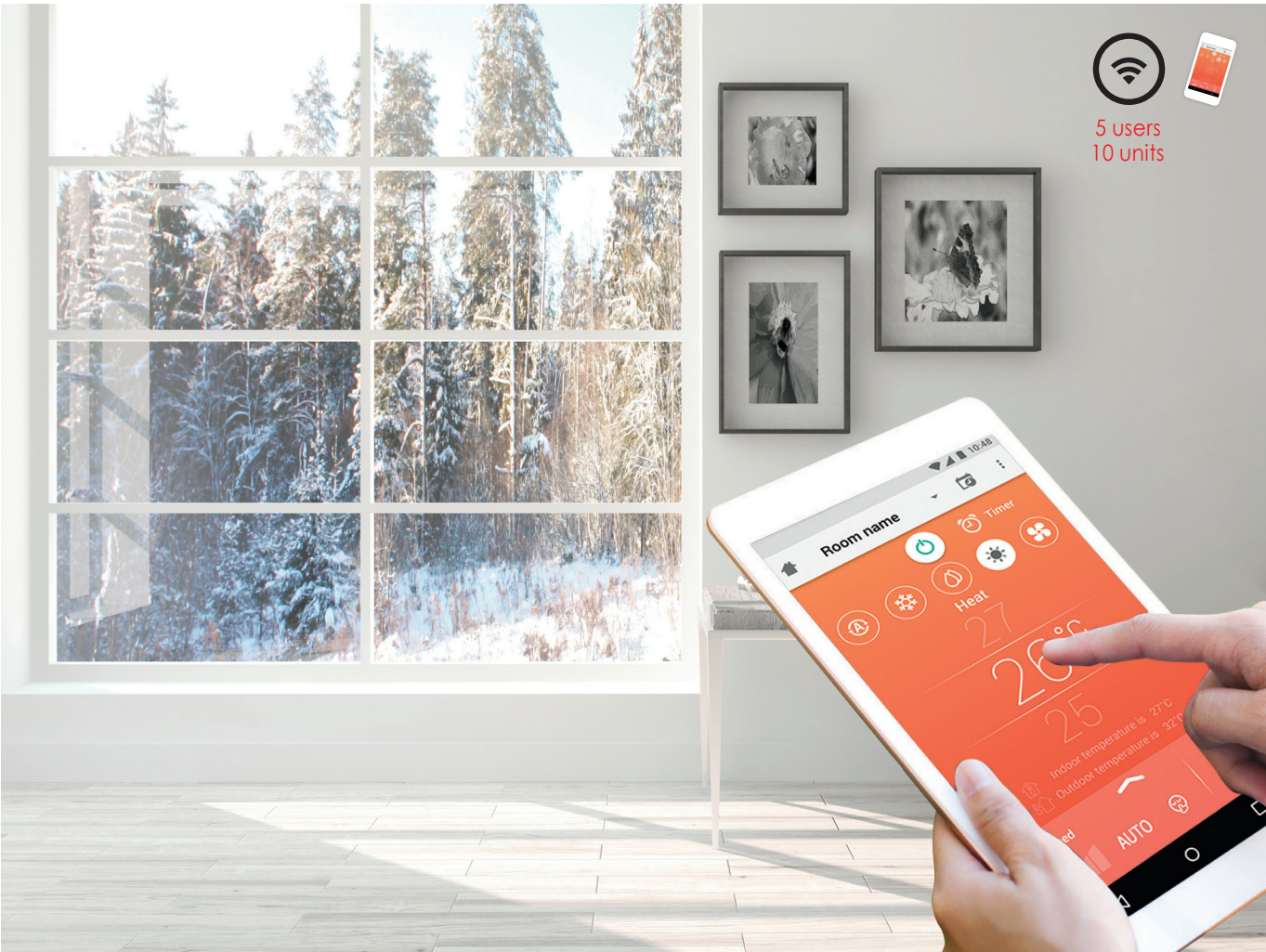
POLAR is a truly intuitive system characterised by unparalleled ease of use:

- It restores the position of the grilles after an automatic restart, minimises interferences and maximises comfort.
- It restarts automatically after a power failure and performs self-diagnostics. The signal lamps on the unit will let you see which functions are active with a single glance.



MOBILE CONTROL

More comfort
wherever you are



Adjust your comfort and find the right level of cooling or heating for your family anytime, anywhere. While at home, you can use the remote controller or WiFi application; the latter also gives you easy access to your air source heat pump when away from home!

Take full control of your air source heat pump using the Toshiba Home AC Control application. The app is easy to use on your smartphone or tablet, both home and away.

8°C Frost protection heating

Fireplace function

Hi-POWER Hi-power function

Silent outdoor unit lowers the noise level

TOSHIBA

POLAR Technical specifications

Outdoor unit			RAS-25J2AVSG-ND	RAS-35J2AVSG-ND
Indoor unit			RAS-25J2KVSG-ND	RAS-35J2KVSG-ND
Heating capacity		kW	3.2	4.2
Heating capacity range (min. - max.)		kW	(1.0 - 7.2)	(1.0 - 7.7)
Input power (min. - rated - max.)		kW	(0.2 - 0.63 - 2.4)	(0.2 - 0.92 - 2.5)
Pdesignh		kW	2.7	3.6
COP		W/W	4.92	4.57
SCOP			5.1	5.1
Energy class		H	A+++	A+++
Maximum heating capacity @ OAT -10°C		kW	4.1	4.5
Maximum heating capacity @ OAT -15°C		kW	3.8	4.0
Maximum heating capacity @ OAT -20°C		kW	3.2	3.3
Maximum heating capacity @ OAT -25°C		kW	2.6	2.7
Cooling capacity		kW	2.8	3.5
Cooling capacity (min. - max.)		kW	(1.1 - 3.5)	(1.3 - 4.5)
Input power (min. - rated - max.)		kW	(0.22 - 0.63 - 0.87)	(0.26 - 0.85 - 1.37)
Pdesignc		kW	2.8	3.5
EER		W/W	4.44	4.12
SEER			7.7	7.3
Energy class		C	A++	A++

POLAR Technical specifications

Outdoor unit			RAS-25J2KVSG-ND	RAS-35J2KVSG-ND
Airflow (max.)	m ³ /h - l/s	C	696 - 192	738 - 204
Sound pressure level (night mode)	m ³ /h - l/s	C	336 - 93	336 - 93
Operating range	dB(A)	C	42/25 (19)	43/25 (19)
Airflow (max.)	m ³ /h - l/s	H	828 - 229	840 - 232
Sound pressure level (night mode)	m ³ /h - l/s	H	336 - 93	336 - 93
Operating range	dB(A)	H	45/25 (19)	45/25 (19)
Dimensions (hxxwx d)	mm		293x800x226	293x800x226
Weight	kg		10	10
Maximum heating capacity @ OAT -25°C		kW	2.6	2.7
Cooling capacity		kW	2.8	3.5
Cooling capacity (min. - max.)		kW	(1.1 - 3.5)	(1.3 - 4.5)
Input power (min. - rated - max.)		kW	(0.22 - 0.63 - 0.87)	(0.26 - 0.85 - 1.37)
Pdesignc		kW	2.8	3.5
EER		W/W	4.44	4.12
SEER			7.7	7.3
Energy class		C	A++	A++

POLAR Technical specifications

Outdoor unit			RAS-25J2AVSG-ND	RAS-35J2AVSG-ND
Airflow (max.)	m ³ /h - l/s	C	1920 - 532	1980 - 548
Sound pressure level (night mode)	dB(A)	C	45 (39)	47 (41)
Operating range	°C	C	-15~46	-15~46
Airflow (max.)	m ³ /h - l/s	H	1920 - 532	1980 - 548
Sound pressure level (night mode)	dB(A)	H	47 (41)	48 (42)
Operating range	°C	H	-25~24	-25~24
Dimensions (hxxwx d)	mm		550x780x290	550x780x290
Weight	kg		38	38
Compressor type			DC Twin Rotary	DC Twin Rotary
Flange connections (gas-liquid)			3/8" - 1/4"	3/8" - 1/4"
Minimum pipe length	m		2	2
Maximum pipe length	m		20	20
Maximum height difference	m		10	10
Pipe length without additional charge	m		15	15
Controller			WH-TA15PE	WH-TA15PE
Refrigerant charge (R32)	kg		0.76	0.76
Power supply	V-ph-Hz		220-240/1/50	220-240/1/50

C: Cooling mode
H: Heating mode



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