

RESIDENTIAL HEATING > AIR TO WATER HEAT PUMP > ESTIA





ENERGY EFFICIENCY & SUSTAINABILITY





R32 refrigerant with low environmental impact

The growing awareness of the global climate emergency and the resulting governmental incentives to decarbonize heating solutions, will require consumers to seek alternative and environmentally sustainable heating solutions. The innovative ESTIA $^{\rm TM}$ R32 range meets this increasing demand and provides a long term solution to your heating

needs, reducing the dependency on conventional fossil fuel/gas based heating solutions.

Delivering high levels of appeal through its impressive capacity specifications for space heating and hot water production, this advanced air-to-water heat pump will also reduce energy bills compared to gas or oil boilers and electric heaters.

GUARANTEED COMFORT

65°C



All year-round hot water

With state-of-the-art liquid injection technology, Toshiba twin rotary compressor enables ESTIA R32 to supply water to heating networks at temperatures that guarantee year-round comfort.

This is true even during exceptionally cold periods (65°C leaving water temperature for sizes 8-11-14kW).

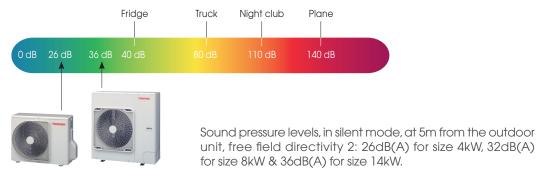
For maximum well-being, ESTIA R32 also produces Domestic Hot Water even at exceptionally high outdoor temperatures (+43°C).

In addition all models will come with either a 3kW, 6kW or 9kW integrated backup heater, ensuring additional heating and DHW supply, whenever needed.

SILENT OPERATIONS







TIMELESS DESIGN FOR FLEXIBLE SOLUTIONS

Space heating for any emitters Under floor heating Medium or low temperature radiators Fan colls Comfort cooling & heating Domestic hot water production



SMART CONTROL, SMART LIFE



Covering one or two zones, ESTIA R32 remote control allows intuitive operation of functions such as silent mode, energy consumption display and scheduling. The auto-adaptive function offers optimum comfort in relation to the outdoor temperature, minimising energy consumption and energy bills.



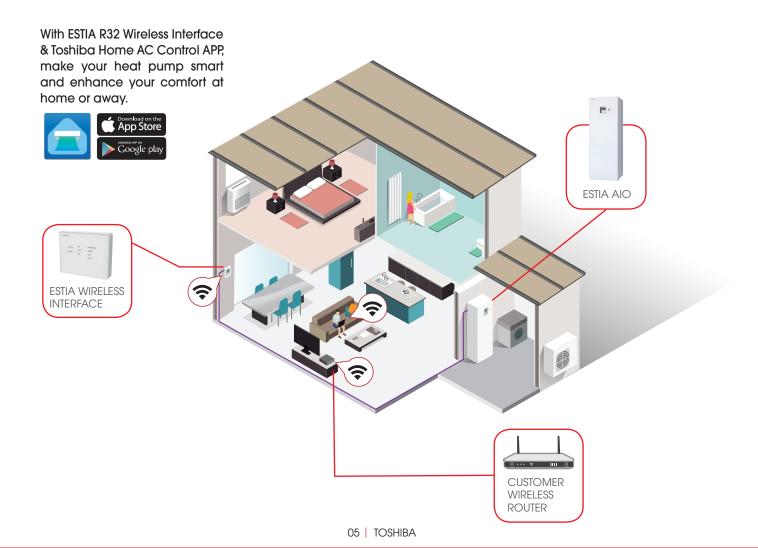
- Energy monitoring
- •Smart speaker voice control functions compatible with

Google Home Assistant

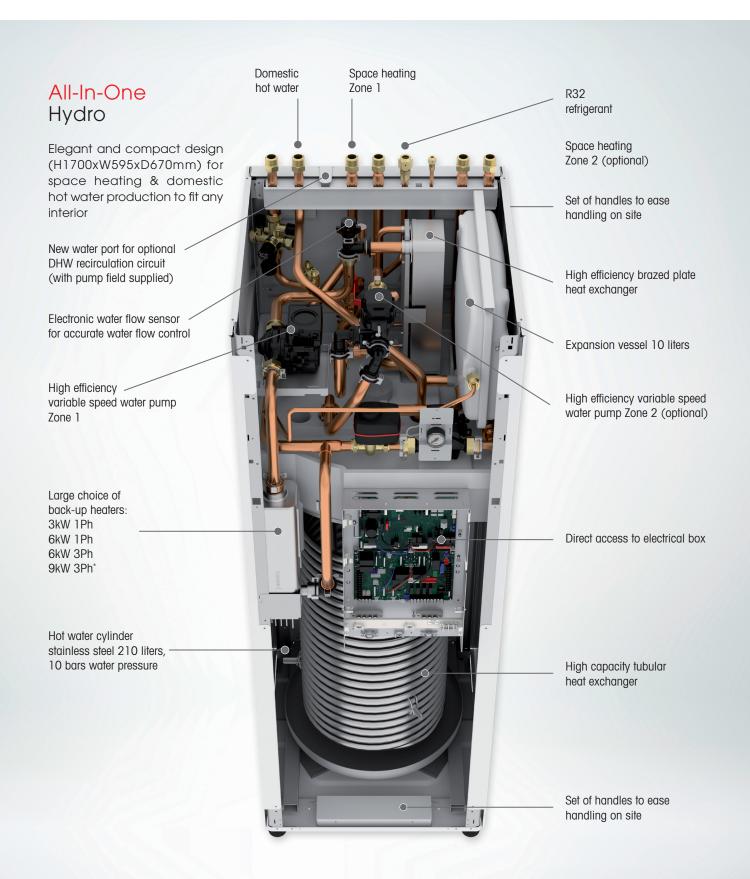
& Amazon Alexa







EASY INSTALLATION



EASY COMMISSIONING

- Ultra compact Hydro Modules with all of the components accessible from the front panel.
- Easy wiring and connections.
- All-In-One indoor floor standing unit offers all water & refrigerant connections from the top.
- Wall Mounted indoor unit offers all connections from the bottom.
- High efficiency components include: brazed plate heat exchangers, electronic water flow control and variable speed pumps.
- Start-up tool for quick & easy commissioning.



Wall Mounted Hydro Unit

Elegant and compact design (H720xW450xD235mm) wall-mounted hydro module, to be combined with a choice of external cylinder capacities (150, 200 or 300 liters).



Expansion vessel 8 liters

Electronic water flow sensor for accurate water flow control

Large choice of back-up heaters:

3kW 1Ph 6kW 1Ph

6kW 3Ph

9kW 3Ph**

High efficiency variable speed water pump



EXCEPTIONAL HOME COMFORT EXPERIENCE

Comfort in Space heating & Domestic hot water production





A+++ SCOP up to 4.65 COP up to 5.20



A+
COP DHW up to 3.21



High leaving water temperature 65°C @+7°C for ODU 8-11-14kW 62°C @-25°C for ODU 8-11kW 55°C @-25°C for ODU 14kW outside air temperature



Outdoor unit noise levels 26 & 28dB(A) for ODU 4-6kW 32 & 35dB(A) for ODU 8-11kW 36dB(A) for ODU 14kW in silent mode at 5m



Wall mounted hydro unit at 1m 29dB(A)
All-In-One at 1m 24 & 30dB(A)



Production of Domestic Hot Water

ESTIA R32 offers an All-In-One hydro module for heating and domestic hot water production, with an integrated 210 liter tank. This elegant solution for new-build properties has a compact footprint - a mere 595x670mm - to fit any interior.

For renovation projects that would require the replacement of a gas boiler, ESTIA R32 is also available with a wall-mounted hydro module offering a large choice of external cylinder capacities for domestic hot water (150, 210 or 300 liters).



Comfort in Cooling

All ESTIA R32 units are reversible units as standard from factory (Insulated pipes + condensate drain pan) offering comfort cooling in summertime if requested by end users.

High coefficient of performance in cooling mode with EER up to 4.65 @ Air 35°C / Water 18°C (for underfloor cooling).

EFFICIENCY & RELIABILITY

Innovation, efficiency, high reliability, energy savings and respect for the environment: these powerful values are at the heart of everything we do at Toshiba Air Conditioning. For over 50 years, Toshiba Air Conditioning has been providing its clients with the guaranteed precision and

expertise of flawless Japanese quality. Products are designed to perform and engineered to perfection.

The Toshiba twin-rotary compressor uses advanced technologies to ensure best-in-class performance with low energy consumption.





A TECHNOLOGY AS INNOVATIVE AS IT IS DISCREET (





A UNIT FOR ANY TYPE → ← OF INTERIOR





SYSTEMS - Performance data

Outdoor unit Wall mounted Hydro unit combination AIO Hydro unit combination			Water T° Water T°		HWT- HWT- HWT-	401HW-E 601XWH_W-E 602\$21\$_W-E	601HW-E 601XWH_W-E 602\$21\$_W-E	801H(R)W-E 1101XWH_W-E 1102S21(S-M)_W-E	1101H(R)W-E 1101XWH_W-E 1102S21(S-M)_W-E	1401H(R)W-E 1401XWH_W-E 1402\$21(\$-M)_W-E	801H8(R)W-E 1101XWH_W-E 1102S21(S-M)_W-E	1101H8(R)W-E 1101XWH_W-E 1102S21(S-M)_W-E	1401H8(R)W-E 1401XWH_W-E 1402S21(S-M)_W-E
	Energy Efficiency Class - Average Climate - Low LWT		35°C		Н	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
Under	SCOP- Average Climate - Low LWT		35°C		Н	4.53	4.58	4.63	4.55	4.65	4.51	4.56	4.57
	Max heating capacity	+7°C	35°C	kW	Н	7.25	7.25	11.9	13.24	18.39	12.27	15.50	18.66
floor	Nominal heating capacity (rated)	+7°C	35°C	kW	Н	4.00	6.00	8.00	11.00	14.00	8.00	11.00	14.00
heating	COP (rated)	+7°C	35°C	W/W	Н	5.20	4.80	5.19	4.60	4.60	5.06	4.74	4.60
	Max heating capacity	+7°C 35°C W/W H 520 -7°C 35°C kW H 4.80 -10°C 35°C kW H 4.40	4.80	6.06	8.11	9.10	13.05	8.23	10.49	13.05			
	Max heating capacity	-10°C	35°C	kW	Н	4.40	5.57	7.49	8.45	11.94	7.59	9.57	11.94
	Energy Efficiency Class - Average Climate - Medium LWT		55°C		Н	A++	A++	A++	A++	A++	A++	A++	A++
	SCOP - Average Climate - Medium LWT		55°C		Н	3.45	3.37	3.63	3.62	3.53	3.59	3.52	3.55
Radiators	Max heating capacity	+7°C	45°C	kW	Н	6.97	6.97	11.75	12.41	16.30	12.02	15.24	18.46
heating	Max heating capacity	-7°C	45°C	kW	Н	4.48	5.80	8.00	8.44	11.94	8.12	10.33	12.83
& DHW	Max heating capacity	+7°C	55°C	kW	Н	6.51	7.53	9.96	10.17	14.31	11.77	14.97	18.15
	Max heating capacity	-7°C	55°C	kW	Н	4.31	5.42	7.35	7.72	10.50	8.00	10.17	12.61
	Max heating capacity	-10°C	55°C	kW	Н	-	-	7.00	7.38	9.92	7.35	9.27	11.56
Cooling	Cooling capacity nominal (rated comp Hz)	35°C	7/12°C	kW	С	4.00	5.00	6.00	8.00	10.00	6.00	8.00	10.00
Cooling	EER nominal			W/W	С	3.45	3.30	3.20	2.80	2.45	2.87	2.62	2.45

Max heating capacity: shown at peak value during operation, at max compressor operating range in accordance with EN14511. Nominal heating capacity are given at water delta 7° 5°C and rated compressor operating frequency in accordance with EN14511.

Physical data

Outdoor unit	HWT-	401HW-E	601HW-E	801H(R)W-E	1101H(R)W-E	1401H(R)W-E	801H8(R)W-E	1101H8(R)W-E	1401H8(R)W-E
Dimensions (HxWxD)	mm	630x800x300	630x800x300	1050x1010x370	1050x1010x370	1050x1010x370	1050x1010x370	1050x1010x370	1050x1010x370
Weight	kg	42	42	75	75	88	92	92	92
Sound pressure level (Rated) H/C at 5m (1)	dB(A)	31/32	32/32	37/36	37/37	45/45	36/39	44/40	45/45
Sound pressure level (Silent Mode) H/C at 5m (1)		26/27	28/27	32/33	35/33	36/37	35/34	35/35	36/37
Compressor type		DC Twin rotary	DC Twin rotary	DC Twin rotary w/injection	DC Twin rotary w/injection	DC Twin rotary w/injection	DC Twin rotary w/injection	DC Twin rotary w/injection	DC Twin rotary w/injection
Refrigerant / Charge (kg)		R32 / 0.9	R32 / 0.9	R32 / 1.25	R32 / 1.25	R32/1.40	R32 / 1.30	R32 / 1.30	R32/1.40
Flare connections (gas-liquid)		4/8" - 2/8"	4/8" - 2/8"	5/8" - 2/8"	5/8" - 2/8"	5/8" - 2/8"	5/8" - 2/8"	5/8" - 2/8"	5/8" - 2/8"
Operating range in space heating	°C	-20~25	-20~25	-25~25	-25~25	-25~25	-25~25	-25~25	-25~25
Operating range domestic hot water	°C	-20~43	-20~43	-25~43	-25~43	-25~43	-25~43	-25~43	-25~43
Operating range in cooling mode	°C	10~43	10~43	10~43	10~43	10~43	10~43	10~43	10~43
Power supply	V-ph-Hz	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	380~415-3N-50	380~415-3N-50	380~415-3N-50

(1) Noise pressure levels EN 12102 at 5m, open field directivity 2.

Physical data

Hydro unit		HWT-	601XWH(M3/M6)W-E	601XWHT6W-E	1101XWH(M3/M6)W-E	1101XWH(T6/T9)W-E	1401XWH(M3/M6)W-E	1401XWH(T6/T9)W-E
Leaving water temperature (without electrical heater)	°C	Н	20 ~ 55°C	20 ~ 55°C	20 ~ 65°C	20 ~ 65°C	20 ~ 65°C	20 ~ 65°C
Electric back up heater capacity kW			3 / 3+3	3+3	3 / 3+3	3+3 / 3+3+3	3 / 3+3	3+3 / 3+3+3
Electric back up heater supply	V-ph-Hz		220~240-1-50	380~415-3N-50	220~240-1-50	380~415-3N-50	220~240-1-50	380~415-3N-50
Maximum current	А		13 / 26	13x2	13 / 26	13x2 / 13x3	13 / 26	13x2 / 13x3
Dimensions (HxWxD)	mm		700x450x235	700x450x235	700x450x235	700x450x235	700x450x235	700x450x235
Weight	Kg		27	27	27	27	27	27
Sound pressure level at 1m	dB(A)		29	29	29	29	29	29

ALL-IN-ONE Hydro unit - Physical data

Hydro unit			HWT-	602\$21 (S-M)(M3/M6)W-E	602S21 (S-M)T6W-E	1102\$21 (\$-M)(M3/M6)W-E	1102S21 (S-M)(T6/T9)W-E	1402S21 (S-M)(M3/M6)W-E	1402\$21 (S-M)(T6/T9)W-E
	Water volume	L		210	210	210	210	210	210
Tank	Material			Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	Maxmum water pressure	bar		10	10	10	10	10	10
Sound pressure level	at 1m (1 zone / 2 zones)	dB(A)		24(S) - 30(M)	24(S) - 30(M)	24(S) - 30(M)	24(S) - 30(M)	24(S) - 30(M)	24(S) - 30(M)
DHW Energy Efficiency Class				A+	A+	A+	A+	A+	A+
DHW ETA WH - Averd	ige climate	%		136	136	130	130	126	126
COP at air 7°C (EN1	5147)			3.21	3.21	3.12	3.12	3,05	3,05
Heating time		Hrs		01h36	01h36	01h05	01h05	0h41	0h41
Leaving water temp	erature (without electrical heater)	°C	Н	20 ~ 55°C	20 ~ 55°C	20 ~ 65°C	20 ~ 65°C	20 ~ 65°C	20 ~ 65°C
Electric back up hed	ater capacity	kW		3 / 3+3	3+3	3 / 3+3	3+3 / 3+3+3	3 / 3+3	3+3 / 3+3+3
Electric back up hed	ater supply	V-ph-Hz		220~230-1-50	380~400-3N-50	220~240-1-50	380~415-3N-50	220~240-1-50	380~415-3N-50
Maximum current		А		13	13 x 2	13 / 26	13x2 / 13x3	13 / 26	13x2 / 13x3
Dimensions (HxWxD)		mm		1700x595x670	1700x595x670	1700x595x670	1700x595x670	1700x595x670	1700x595x670
Weight (1 zone / 2 zo	ones)	Kg		116/122	116/122	116/122	116/122	116/123	116/124



