









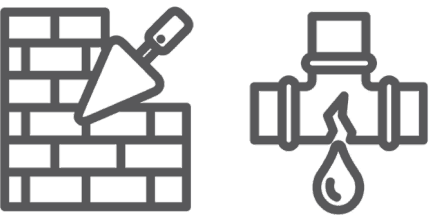



ESTIA next generation

Simplify your water-life ...

ESTIA LINE-UP 2021 – R410A



Line-up meeting for market applications










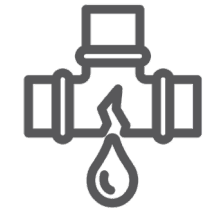


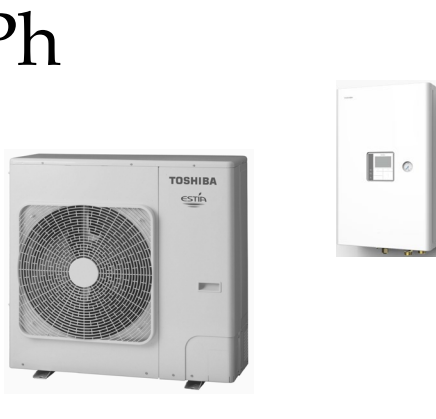

P nom. (kW)		4	8	11	14	16
ESTIA series 5 Standard	 all applications 	1-Ph 	1-Ph 	1-Ph/ 3-Ph 	1-Ph/ 3-Ph 	3-Ph 
ESTIA series 5 Hi-Power	 all applications / Renovation 		1-Ph/ 3-Ph 	1-Ph/ 3-Ph 	3-Ph 	

A++
for R410A

ESTIA LINE-UP 2021 – NEW R32



New Line-up meeting all market applications






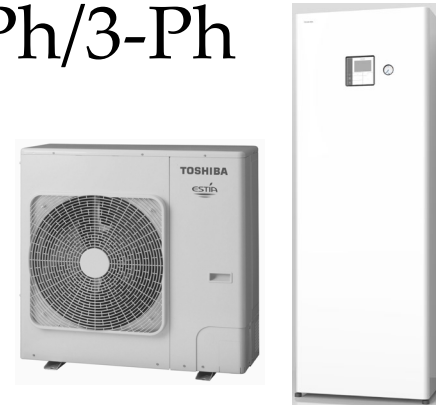

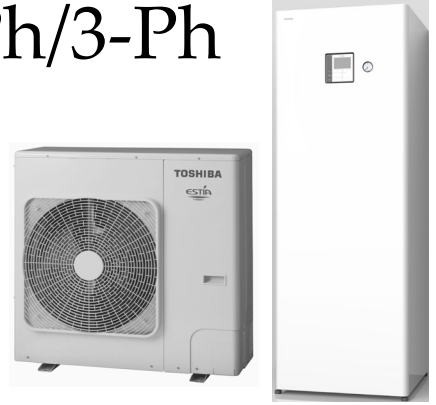


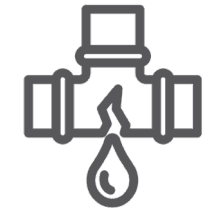





P nom. (kW)		4	6	8	11	14	16
ESTIA series 1 All in One  	New houses 	1-Ph 	1-Ph 	1-Ph 	1-Ph 		
ESTIA series 1 Split Hydrobox  	Renovation 	1-Ph 	1-Ph 	1-Ph 	1-Ph 		

**A+++
for R32**

ESTIA FULL LINE-UP – NEW R32



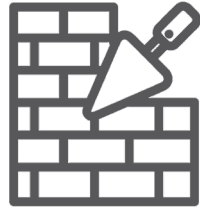



























New Line-up meeting all market applications

P nom. (kW)		4	6	8	11	14	16
ESTIA series 1 All in One  	New houses 	1-Ph 	1-Ph 	1-Ph/3-Ph 	1-Ph/3-Ph 	1-Ph/3-Ph 	
ESTIA series 1 Split Hydrobox  	Renovation 	1-Ph 	1-Ph 	1-Ph/3-Ph 	1-Ph/3-Ph 	1-Ph/3-Ph 	

**A+++
for R32**


























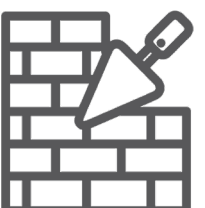




New Line-up meeting all market applications

P nom. (kW)		4	6	8	11	14	16
ESTIA series 1 All in One  	New houses 	1-Ph 	1-Ph 	1-Ph 	1-Ph 		
ESTIA series 1 Split Hydrobox  	Renovation 	1-Ph 	1-Ph 	1-Ph 	1-Ph 		
ESTIA series 5 Standard 	all applications  	1-Ph 		1-Ph 	1-Ph/ 3-Ph 	1-Ph/ 3-Ph 	3-Ph 
ESTIA series 5 Hi-Power 	all applications / Renovation  			1-Ph/ 3-Ph 	1-Ph/ 3-Ph 	3-Ph 	

ESTIA FULL LINE-UP



New Line-up meeting all market applications

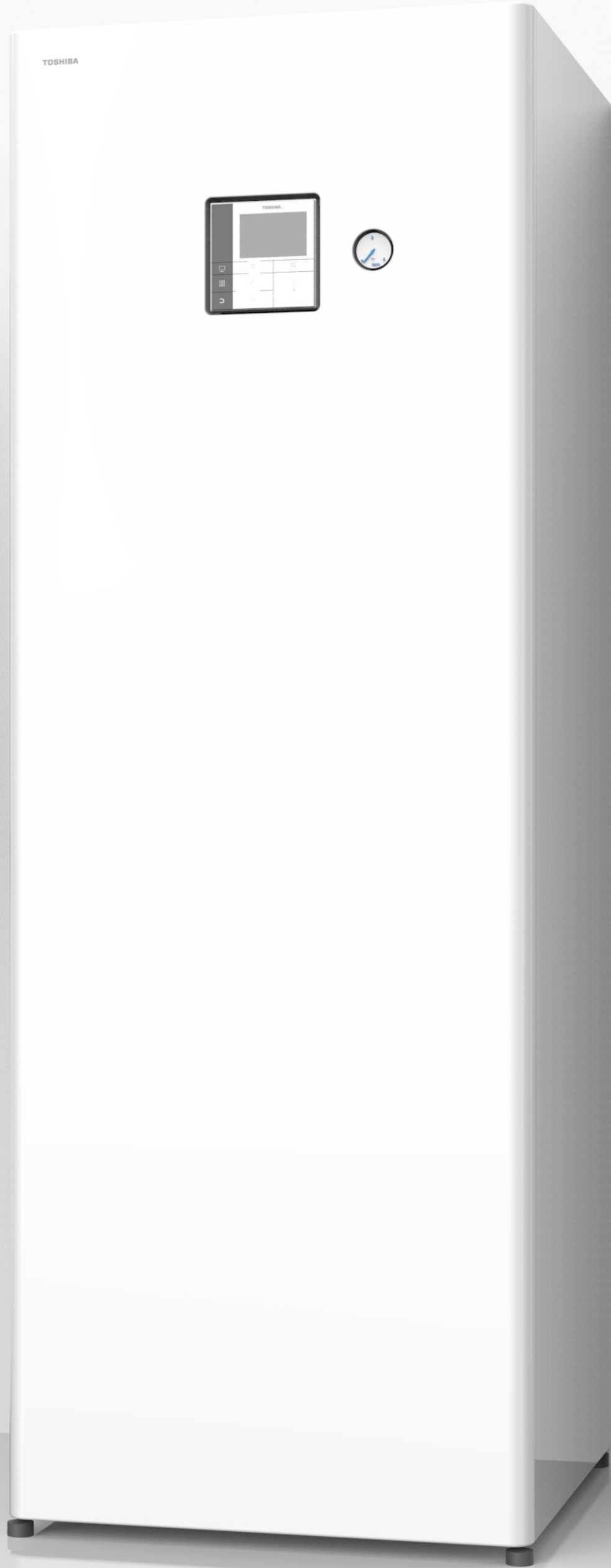
P nom. (kW)		4	6	8	11	14	16
ESTIA series 1 All in One  	New houses 	1-Ph 	1-Ph 	1-Ph/3-Ph 	1-Ph/3-Ph 	1-Ph/3-Ph 	
ESTIA series 1 Split Hydrobox  	Renovation 	1-Ph 	1-Ph 	1-Ph/3-Ph 	1-Ph/3-Ph 	1-Ph/3-Ph 	
ESTIA series 5 Standard 	all applications  	1-Ph 		1-Ph 	1-Ph/3-Ph 	1-Ph/3-Ph 	3-Ph 
ESTIA series 5 Hi-Power 	all applications / Renovation  			1-Ph/3-Ph 	1-Ph/3-Ph 	3-Ph 	



ESTIA next generation

Simplify your water-life ...





ESTIA R32 LINE-UP



New Line-up meeting all market applications



New Logo:

ESTiA

ESTiA

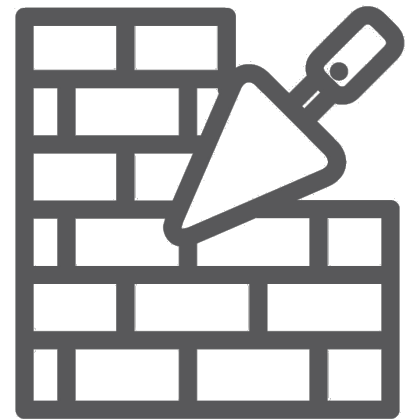
Line-up & specifications

Nominal capacities: 1-ph 4, 6 (new), 8, 11, 14 kW
3-ph 8, 11, 14 kW

Target specifications:

KPI	ESTIA R410a	ESTIA R32
Energy Label	A++	A+++
COP @+7/35°C	≤ 4.9	≤ 5.0
COP @-7/35°C	≤ 3.7	≤ 3.7

New Line-up meeting all market applications



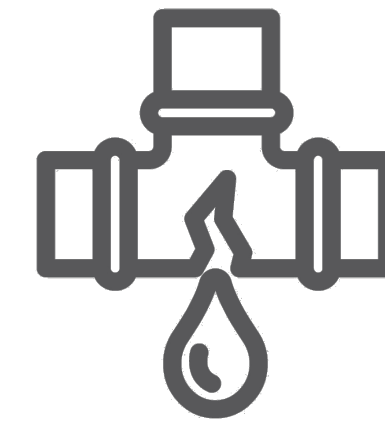
New houses market (ca. 40%)

■ All-In-One Hydromodule:

- Plug and Play
- Compact
- Easy to use
- One system for heating & domestic hot water



- KEY product to address wholesalers with A2W
- New houses market dynamic growth



Renovation market (ca. 60%)

■ Hydromodule for HiWall-installation + Tank:

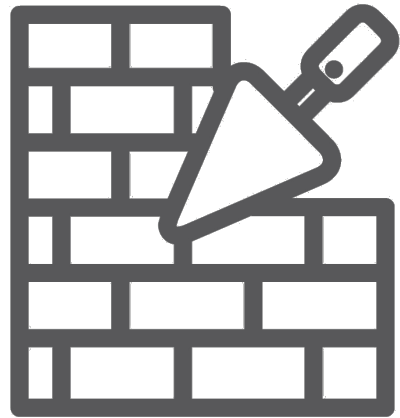
- Easy to replace old heating system
- Local government incentives to install “environmental friendly” solutions



- Strongly influenced by fossil energy cost increase anticipation



ESTIA for NEW houses



■ New houses market:

Requirements: space heating AND domestic hot water production solutions

- New houses: well insulated thanks to energy saving regulations
 - Small heating capacity 4-6-8 kW mainly
- Target: maximise energy savings
 - Priority to floor heating solutions and low-temperature radiators
 - Low leaving water temperature required (35°C to 55°C)
- Limited space in new houses
 - No space to install an A2W split heat pump + DHW tank
 - All-in-One IDU allows *small footprint solution*



4 – 6 kW

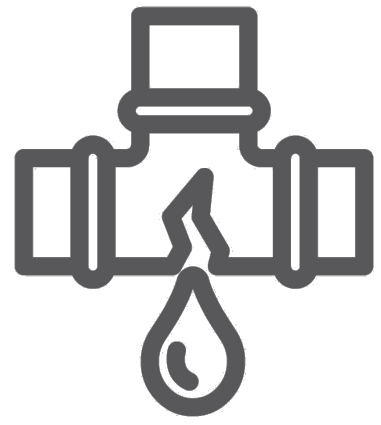


8-11-14 kW



All-in-One
indoor unit

ESTIA for EXISTING houses



■ Existing houses (refurbishment / renovation) :

- Old houses, with low or poor insulation
 - High capacities required: 8 - 11 - 14 kW
 - 1-Ph and **3-Ph** needed
- Replacement of old heating system (gas or oil boilers)
 - Medium/high leaving water temperature required: 55 to 65°C (@-15°C)
Separated DHW tank for easy & customized replacement work



8-11-14 kW

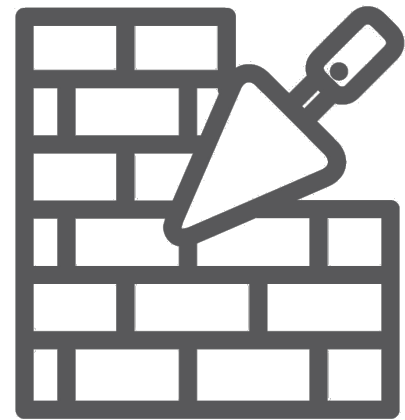


Hydromodule
for HiWall
installation



DHW-Tank

Neues Line-up für alle Marktanwendungen



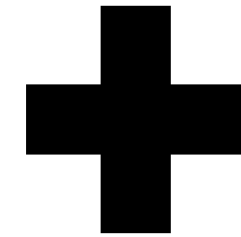
■ New houses market: **All-In-One indoor unit**



4-6 kW

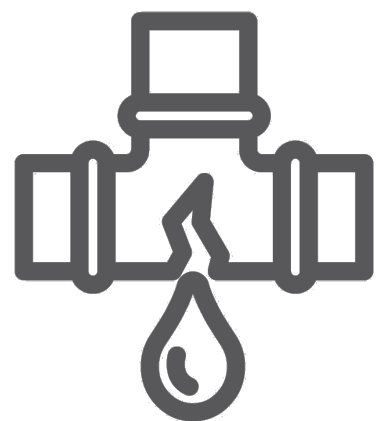


8-11-14 kW



All-in-One
indoor unit

- Low-GWP refrigerant
- Low refrigerant charge
- **4-6-8 kW outdoor units (1-Ph)**
- Integrated DHW tank (210 Ltr.)
- Low sound level ODU



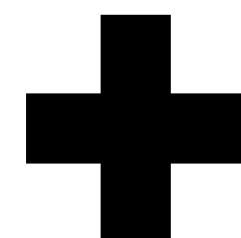
■ Existing houses (refurbishment) market: **indoor unit for HiWall installation**



4-6 kW



8-11-14 kW



Hydromodule
for HiWall
installation



DHW-Tank

- Low-GWP refrigerant
- Low refrigerant charge
- **8-11-14 kW outdoor units (1-Ph & 3-Ph)**
- Separated DHW-Tank

Outdoor unit Line-up

Split-outdoor units								
power supply	1-Ph		1-Ph		3-Ph		1-Ph	3-Ph
P nom. (kW)	4	6	8	11	8	11	14	14
ESTIA Serie 1 								

4.5kW → 4.0kW

New Model

11 kW 1-Ph/3-Ph
2 Fan → 1 Fan
Unique Selling Point

14 kW 1-Ph/3-Ph
2 Fan → 1 Fan
Unique Selling Point



New ESTIA R32 outdoor unit chassis offers SILENT-operation

Indoor unit Line-up

■ **Hydrobox: most compact IDU on the market!**



Hydrobox	series 5 current	new
HxBxT (mm)	919 × 519 × 386	720 × 460 × 240
Gewicht (kg)	49 kg	32 kg

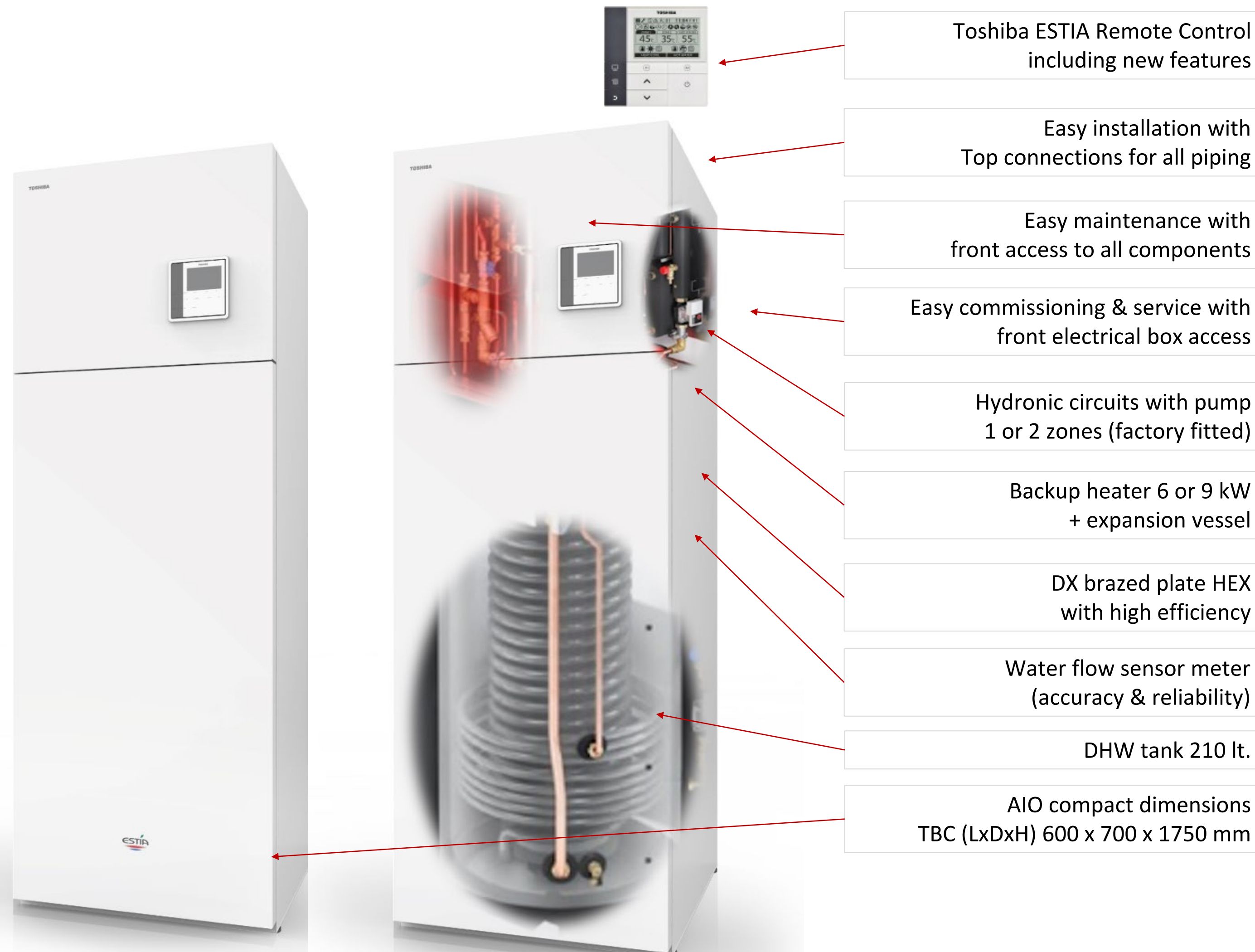
■ **All-In-One indoor unit:**

210 litres to optimise DHW production, 1&2 zone factory fitted, 6 or 9 kW backup heater



Outdoor units P nom. (kW)				4	6	8	11	14
All-in-One indoor units	Tank	Heater	Zone					
	210 Ltr.	3 kW	1	✓				
		6 kW	1	✓				
		9 kW	2					
		6 kW	1					
9 kW		2						

New All-In-One indoor unit – Details



Toshiba ESTIA Remote Control including new features

Easy installation with Top connections for all piping

Easy maintenance with front access to all components

Easy commissioning & service with front electrical box access

Hydronic circuits with pump 1 or 2 zones (factory fitted)

Backup heater 6 or 9 kW + expansion vessel

DX brazed plate HEX with high efficiency

Water flow sensor meter (accuracy & reliability)

DHW tank 210 lt.

AIO compact dimensions TBC (LxDxH) 600 x 700 x 1750 mm

ESTIA All-In-One hydro unit, a complete & compact solution:

- ✓ Small foot print
- ✓ Multi zone factory fitted
- ✓ High efficiency BPHE
- ✓ Easy installation, easy start up
- ✓ Easy service
- ✓ Extended control features

Note: pictures are not contractual, can be modified during project.

ESTIA 4 & 6kW outdoor unit



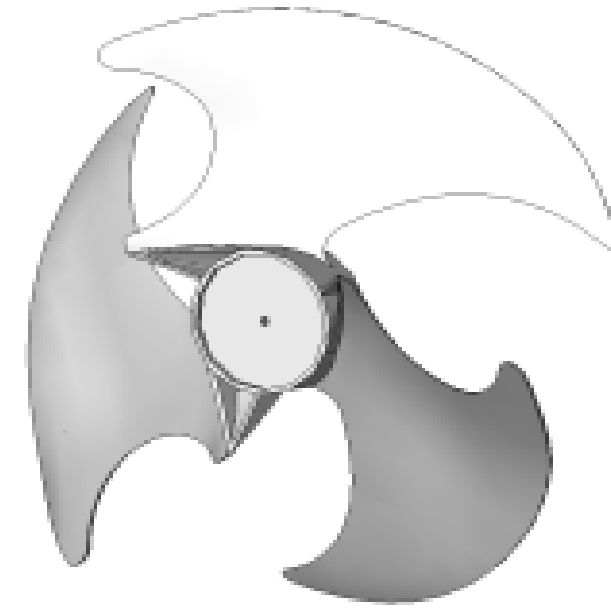
	height	with	depth
Toshiba	630 mm	800 mm	300 mm
Daikin Altherma 3	740 mm	884 mm	388 mm
Melco Ecodan	880 mm	848 mm	330 mm

Compact and high performance!

ESTIA 4 & 6kW outdoor unit

Inverter compressor control

- Supplies all benefits from **TOSHIBA's proven DAISEIKAI series**



High Efficiency Fan propeller

- Improve the efficiency of air flow due to reduce the electrical power for air flow

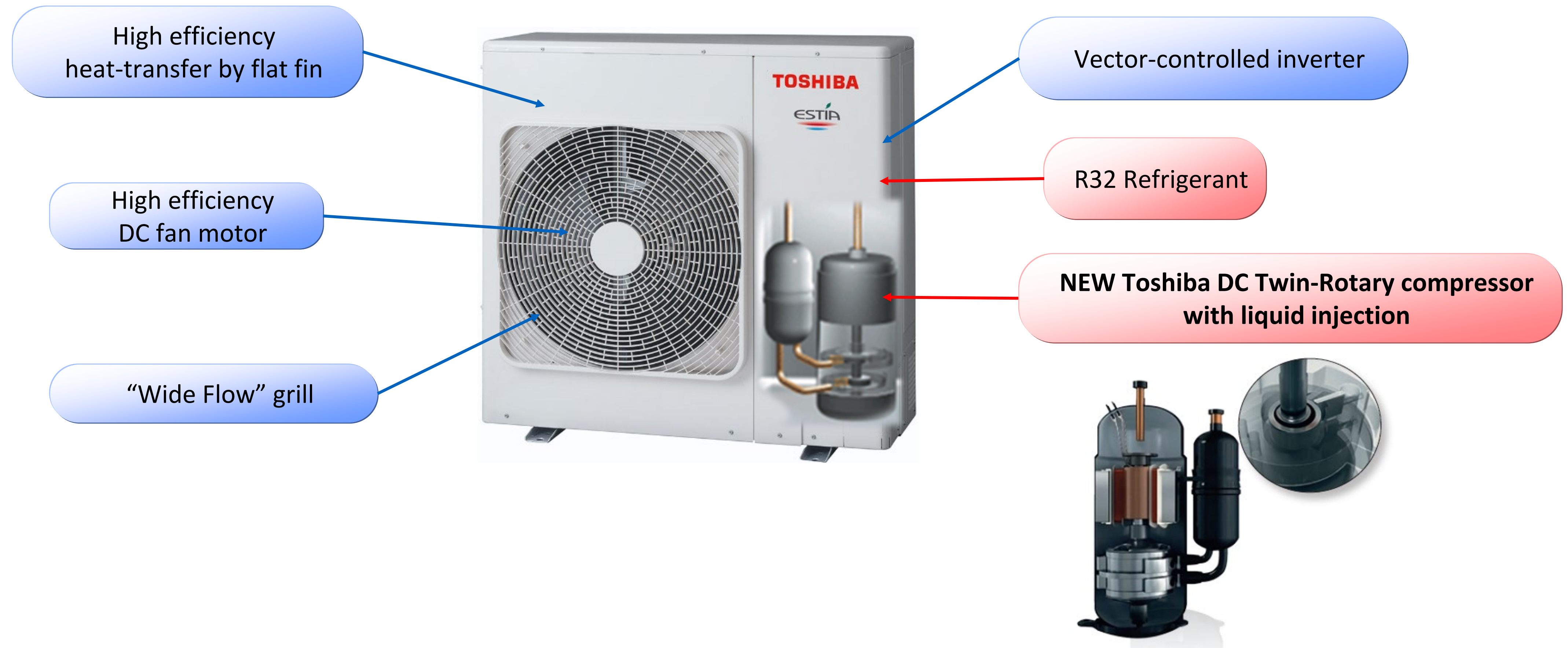


TOSHIBA DC Twin-rotary compressor

- Improved the efficiency via developed new motor and compression unit
- Improved system efficiency through less discharged oil in refrigeration circuit

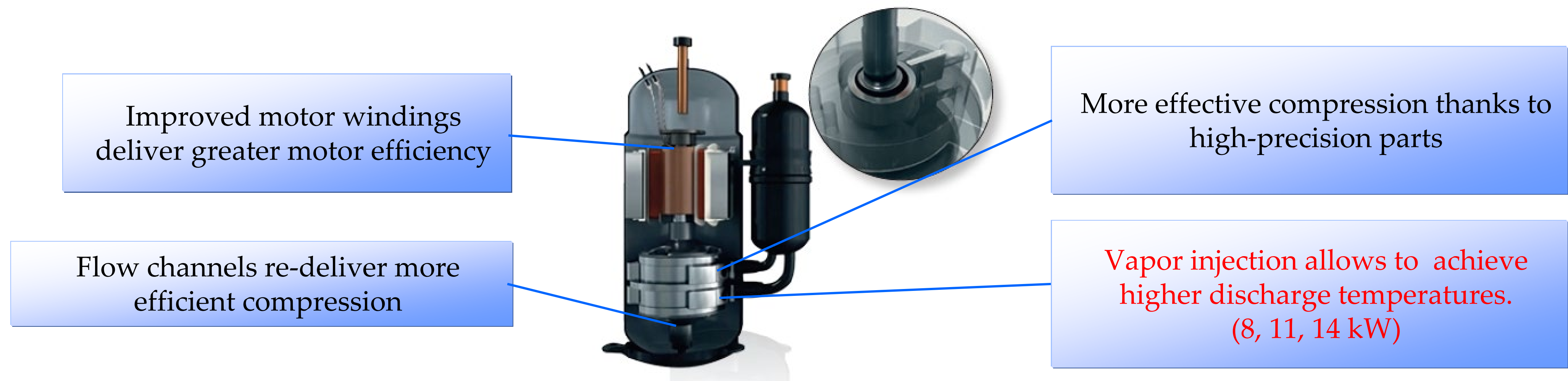


ESTIA 8-11-14 kW outdoor unit



NEW Toshiba DC Twin rotary compressor

- Vector controlled Inverter enables a wider range of frequencies and voltages
- Large capacity range operation, with an effective system of power consumption
- **New Toshiba DC Twin Rotary injection compressor allow high capacity at very low ambient temperatures**



ESTIA user interface

ESTIA RC Main features

- Auto mode
- Schedule timer
- Night setback
- Summer time setting
- Schedule setting
- Floor drying
- Service mode
- Alarm history
- Service monitor



QUIET Mode,
preventing nuisance noise at night,
by reducing the sound level of the
outdoor unit down to -7 dB(A)



ANTI-BACTERIA Control,
regularly increases the
temperature in the domestic hot
water tank to 75°C for 30



NIGHT Mode,
automatically reducing the
water temperature at night



Frost protection,
ensuring a minimum
temperature is maintained at
all times to prevent freezing



BOOST Function,
... whenever you need domestic
hot water quickly ...

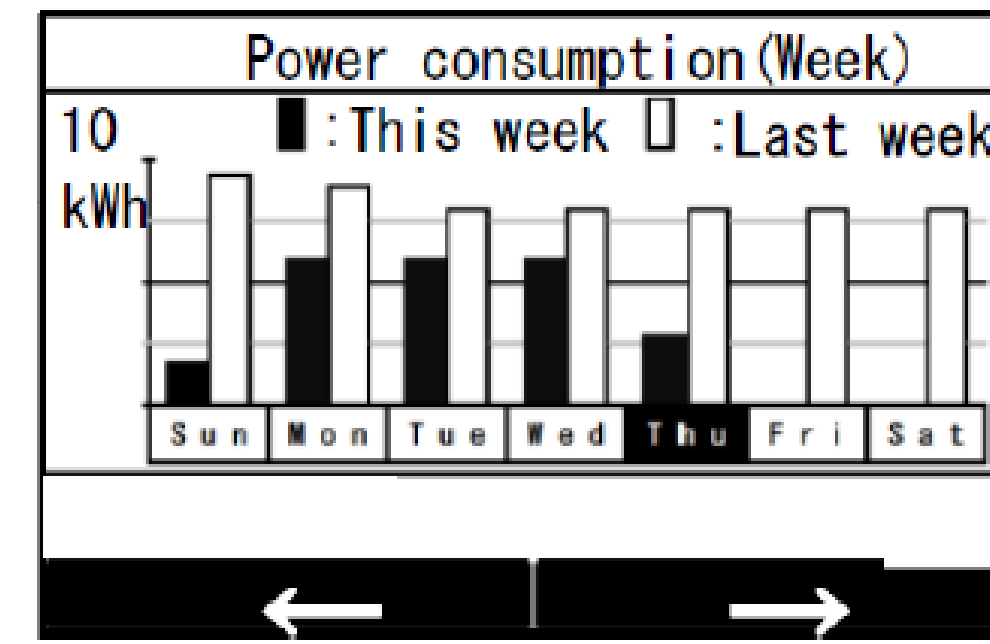
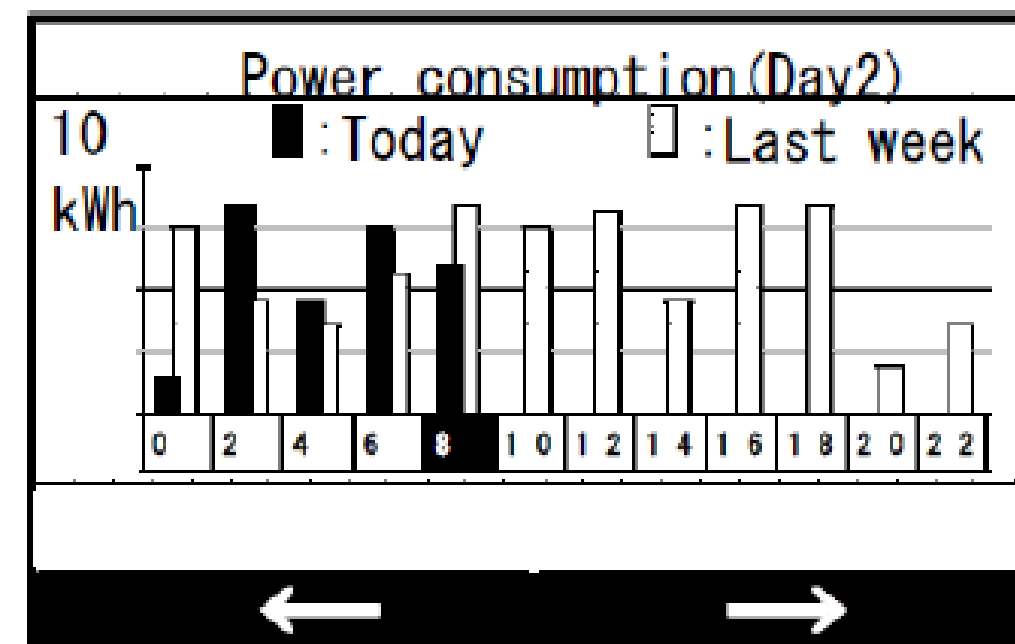
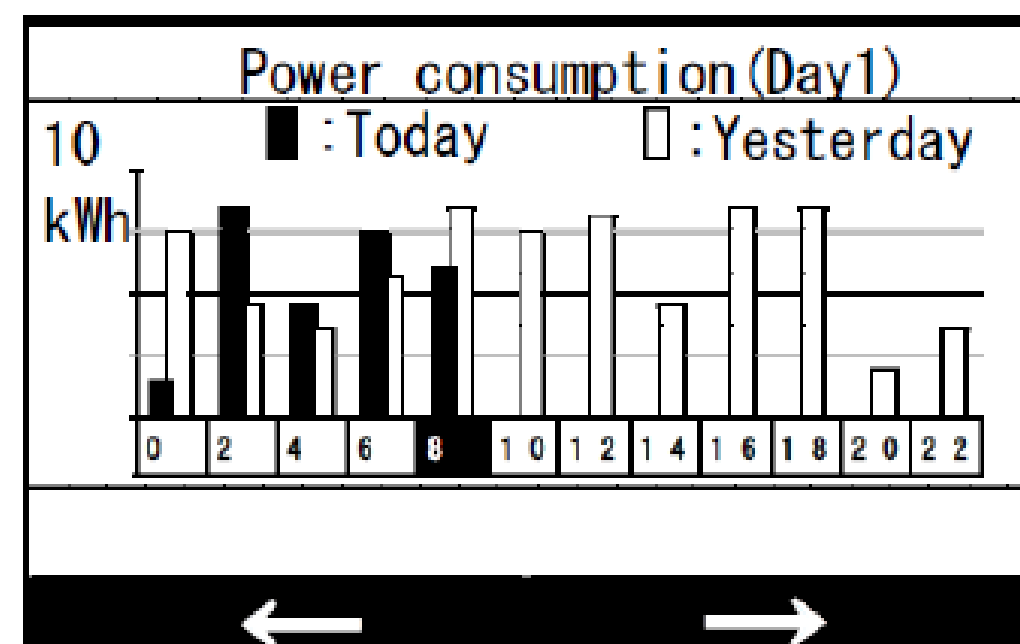
UPDATED user interface

■ New ESTIA R32 Remote Control with 15 languages:

- | | |
|------------------|--------------|
| <u>English</u> | Dutch |
| Portugese | French |
| Finnish | Polish |
| <u>German</u> | <u>Czech</u> |
| Danish | Spanish |
| <u>Hungarian</u> | Italian |
| <u>Croatian</u> | Turkish |
| <u>Slovenian</u> | |

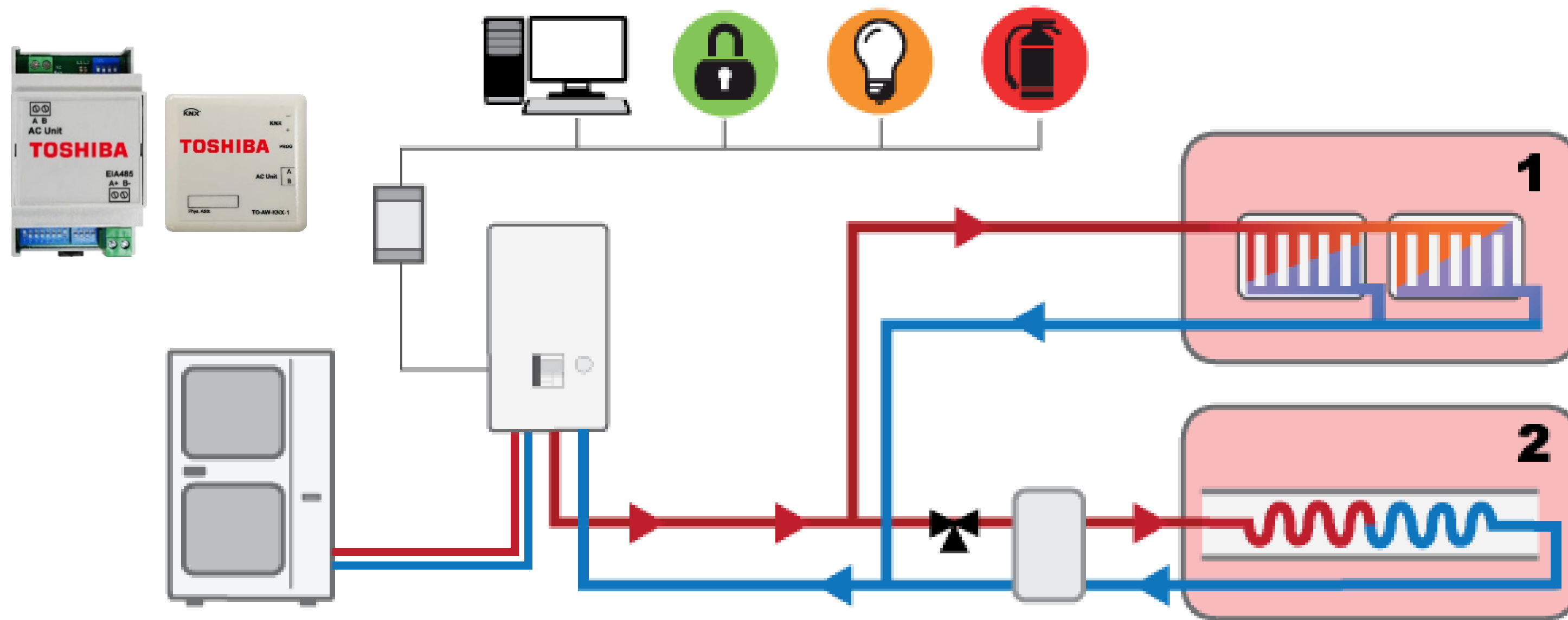


■ New ESTIA R32 RC with Power consumption display



ESTIA Connectivity & SG Ready

Modbus® & KNX connectivity optional



Note:

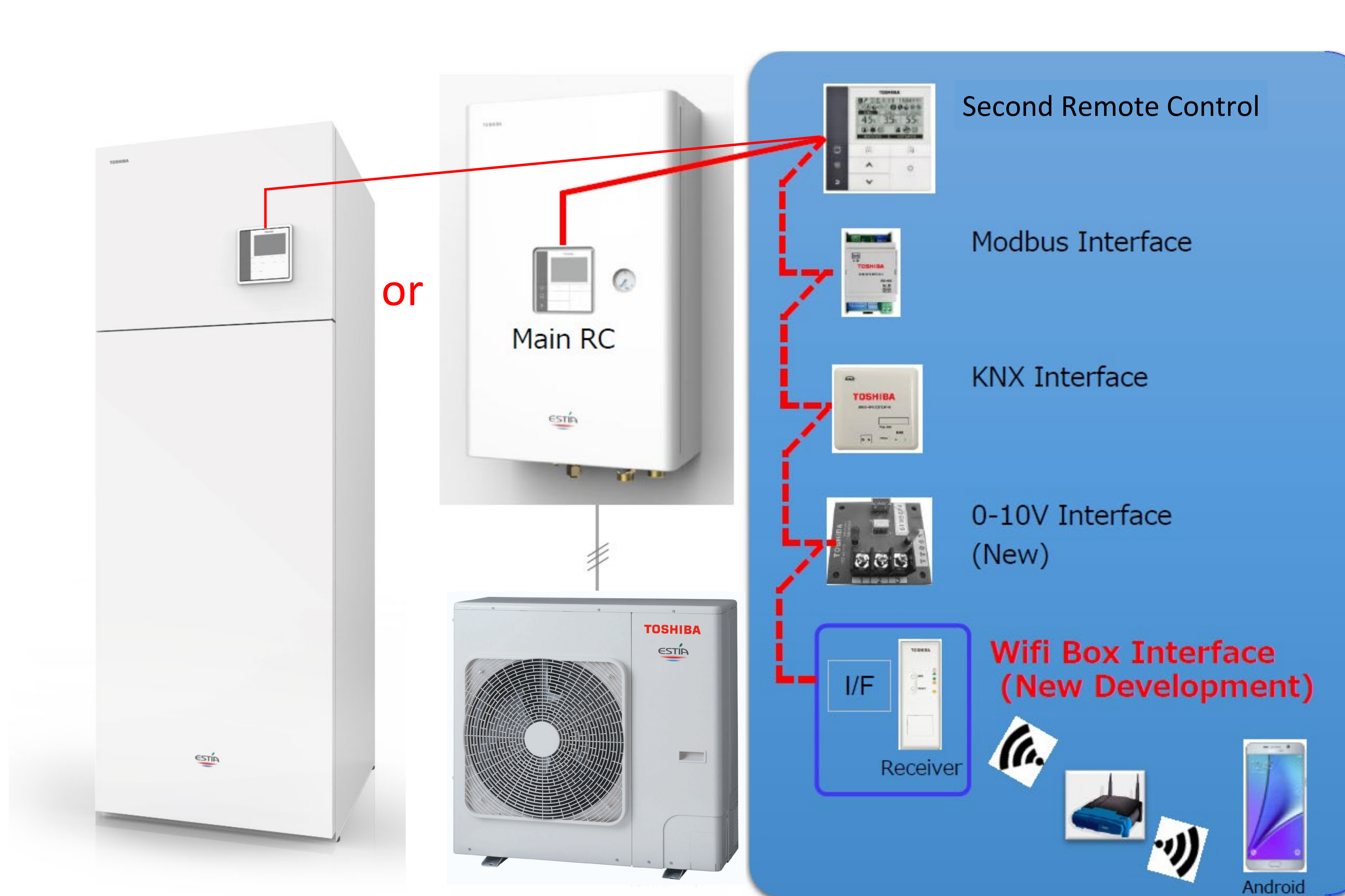
- 2nd RC cannot be connected together with Modbus®/KNX interface.
- Modbus®/ KNX interface can be connected to series 4 and series 5

* Modbus® is a registered trademark of Schneider E.



"Smart Grid Ready" allows the Electricity Supplier to automatically control the operating change the electrical load on the network.

ESTIA R32 controllers

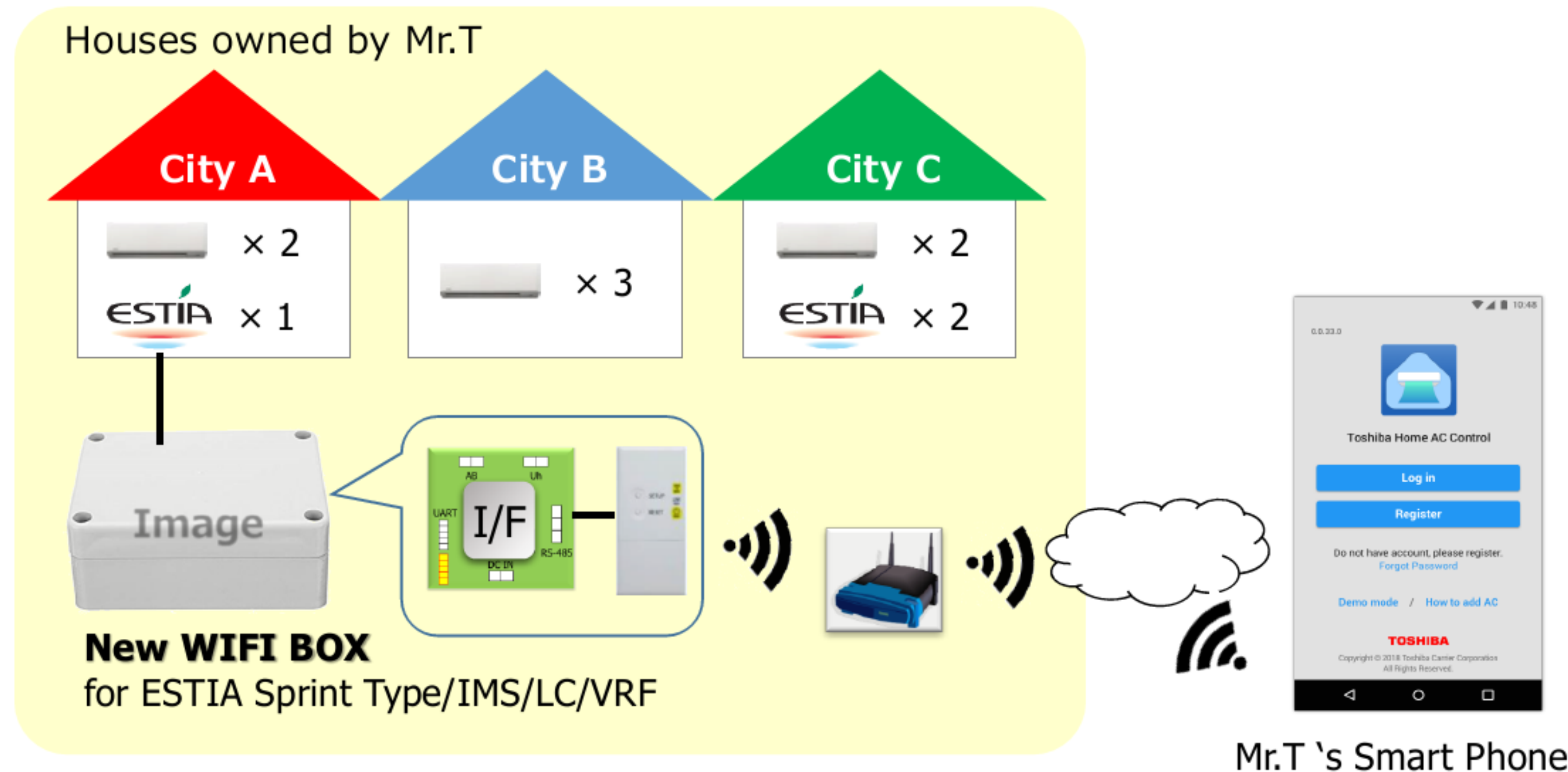
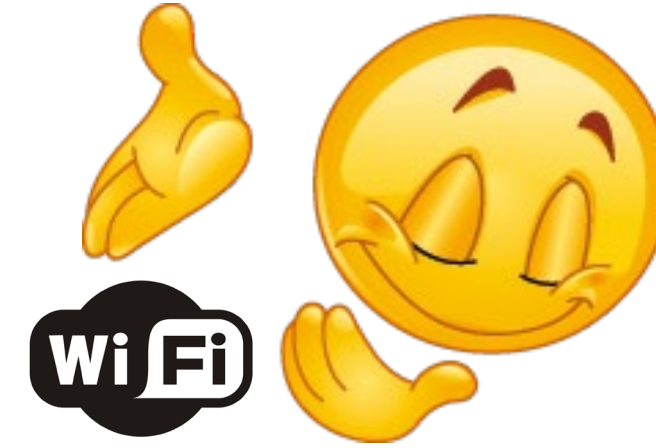


WiFi solution

Extend "Toshiba Home AC control" APP other IDU's: ESTIA, RAV, VRF

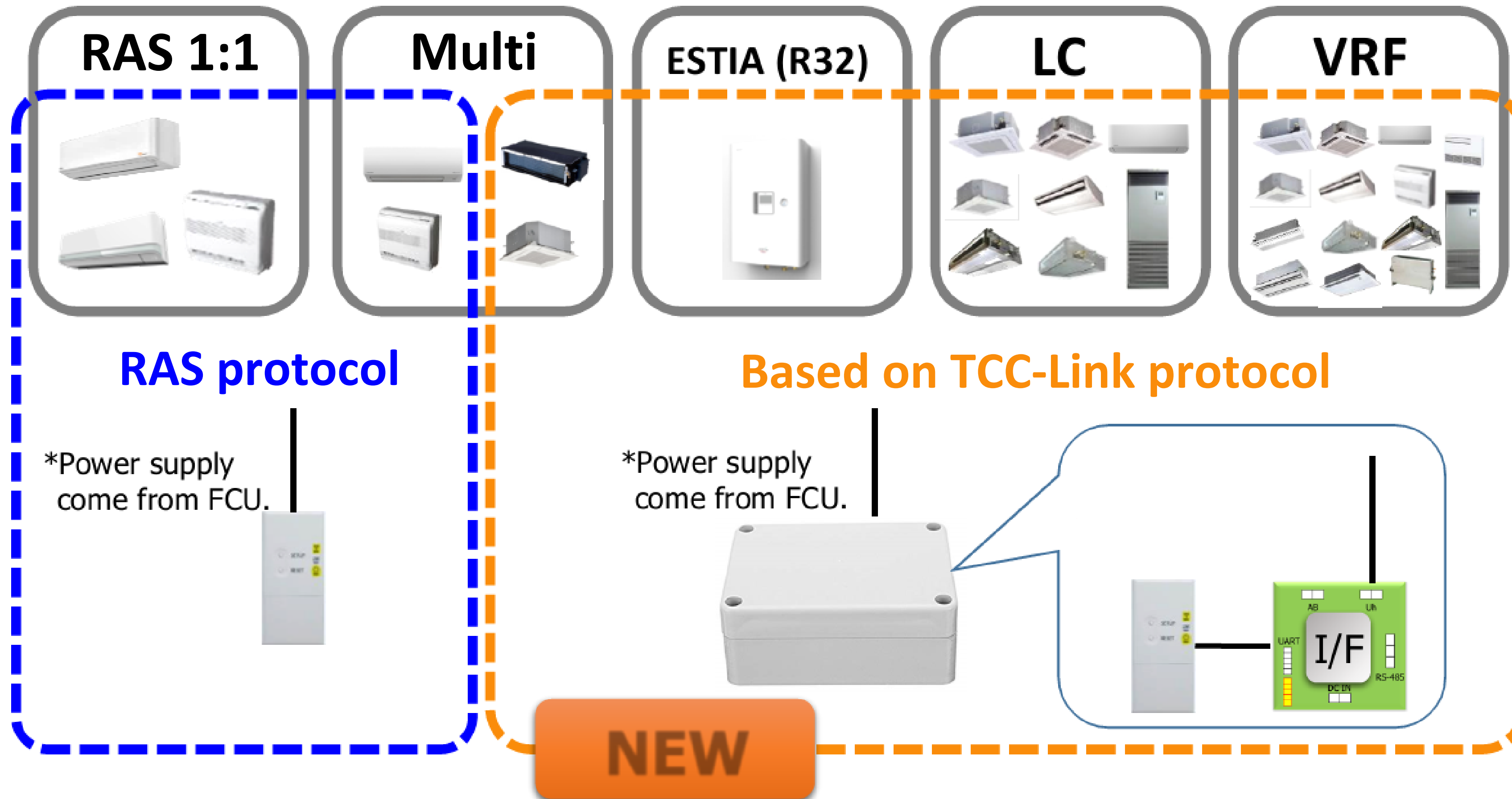
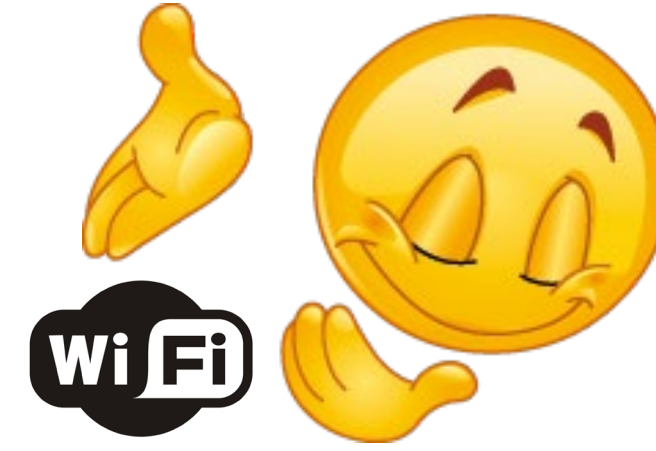
Multiple systems at different locations shall be controlled with same application/ID.

1:1 connection with Hydro unit or standard indoor units



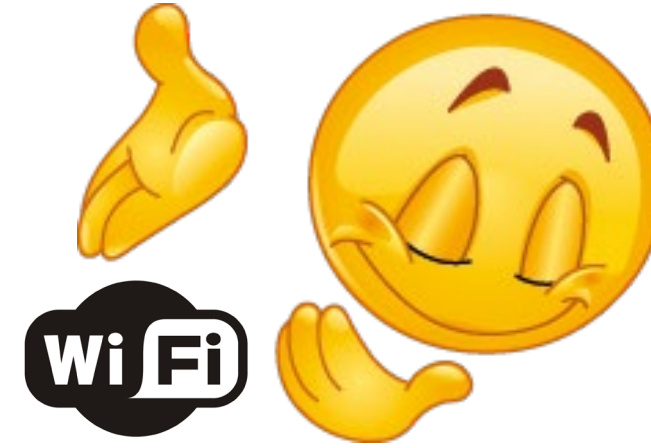


WiFi solution





WiFi solution





WiFi Lösung

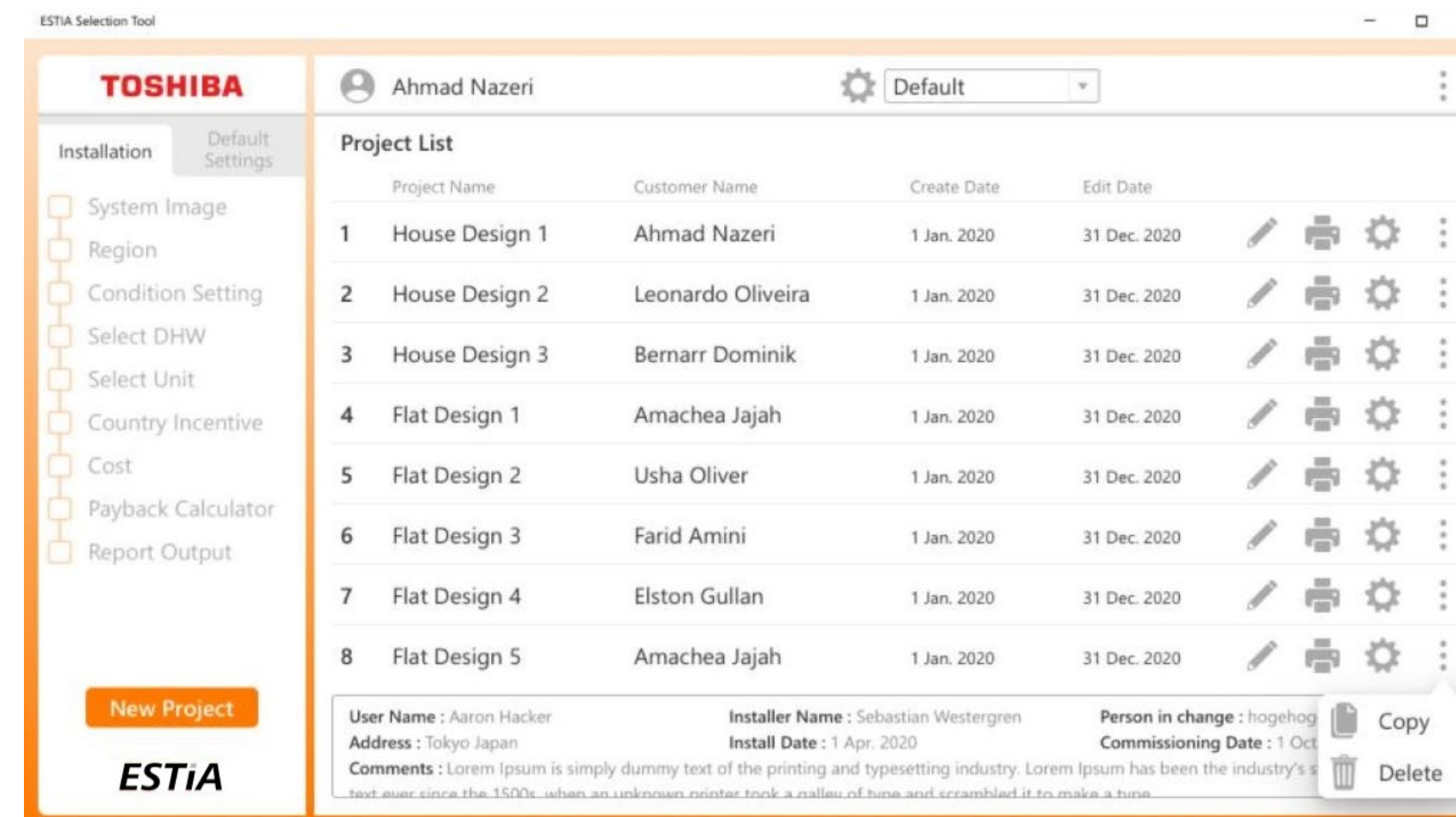


	Functions	Hydrobox' Remote Control	second Remote Control	Toshiba Home AC APP
End user	Auto mode	✓	✓ (On/Off)	✓
	Water Temperatures (Zone1, Zone2, DHW)	✓	✓	✓
	Night setback	✓	✓ (On/Off)	✓
	Silent mode	✓		✓
	Hot water boost	✓	✓	✓
	Anti bacteria	✓	✓ (On/Off)	✓
	Frost protection	✓	✓ (On/Off)	✓
	Header/Second	✓	✓	✓
	Multi Languages	✓	✓	✓
	Timer	✓		✓
	Schedule setting	✓		TBC
	Holiday setting	✓		TBC
Energy consumption tracking	✓		TBC	
Commissioning & Service	Test mode	✓	✓	
	Floor drying	✓	✓	
	Forced defrosting	✓	✓	
	Unit model numbers info	✓	✓	n/a
	Alarm history	✓	✓	
	Service monitor	✓	✓	

ESTIA new selection software



New Selection tool (local-not web based)
New user friendly interface

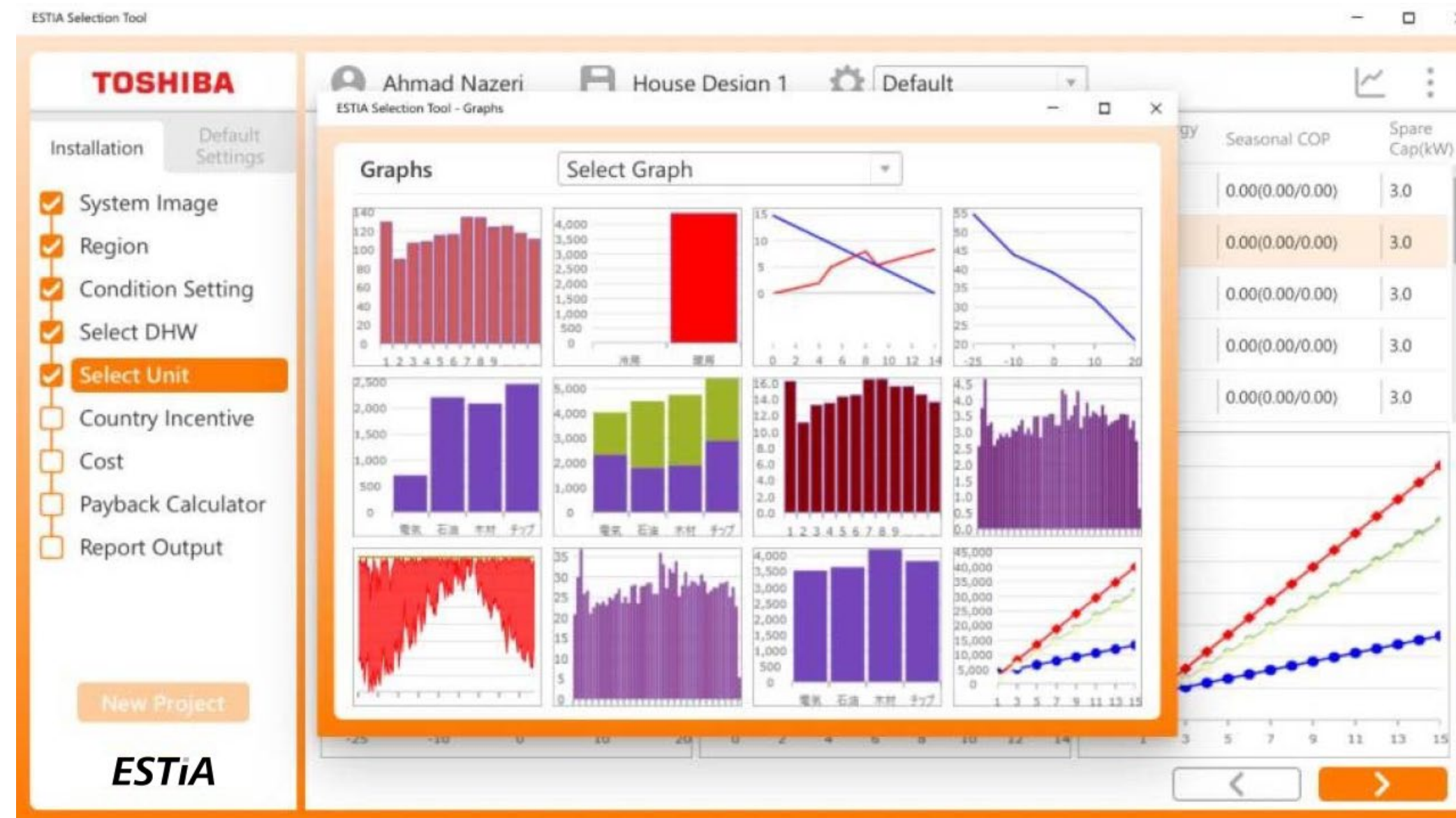


Project mode
Easy settings (energy cost, prices, etc.)

Multiple application/systems approach
Heating load calculator (estimation)



ESTIA new selection software



Large choice of charts display
Customized report



Annual consumption comparison with other energies
Return On Investment calculations
(including local incentives)

ESTIA 3RD PARTY CERTIFICATION

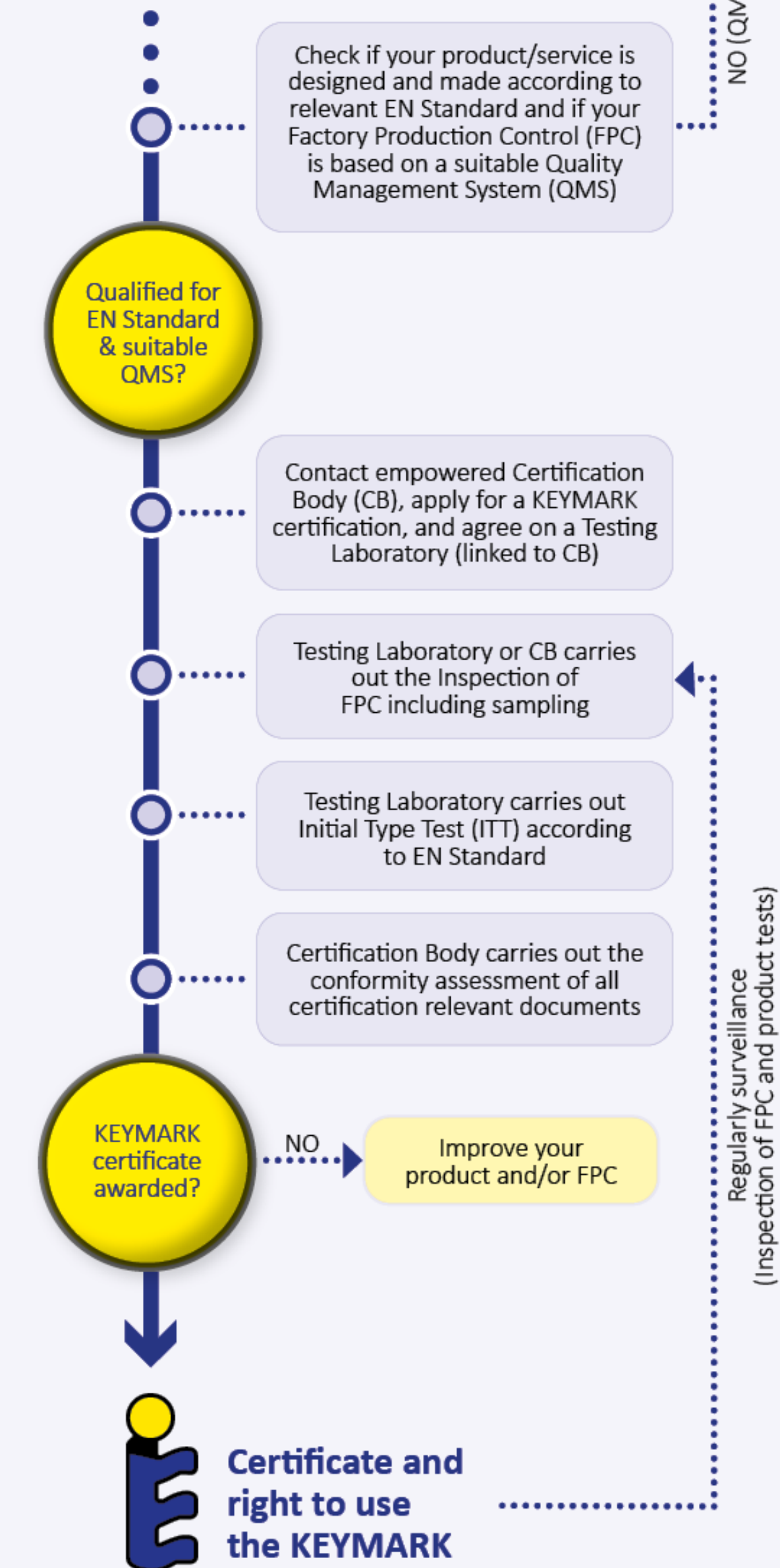
3rd party certification: KEYMARK



CEN heat pump
KEYMARK

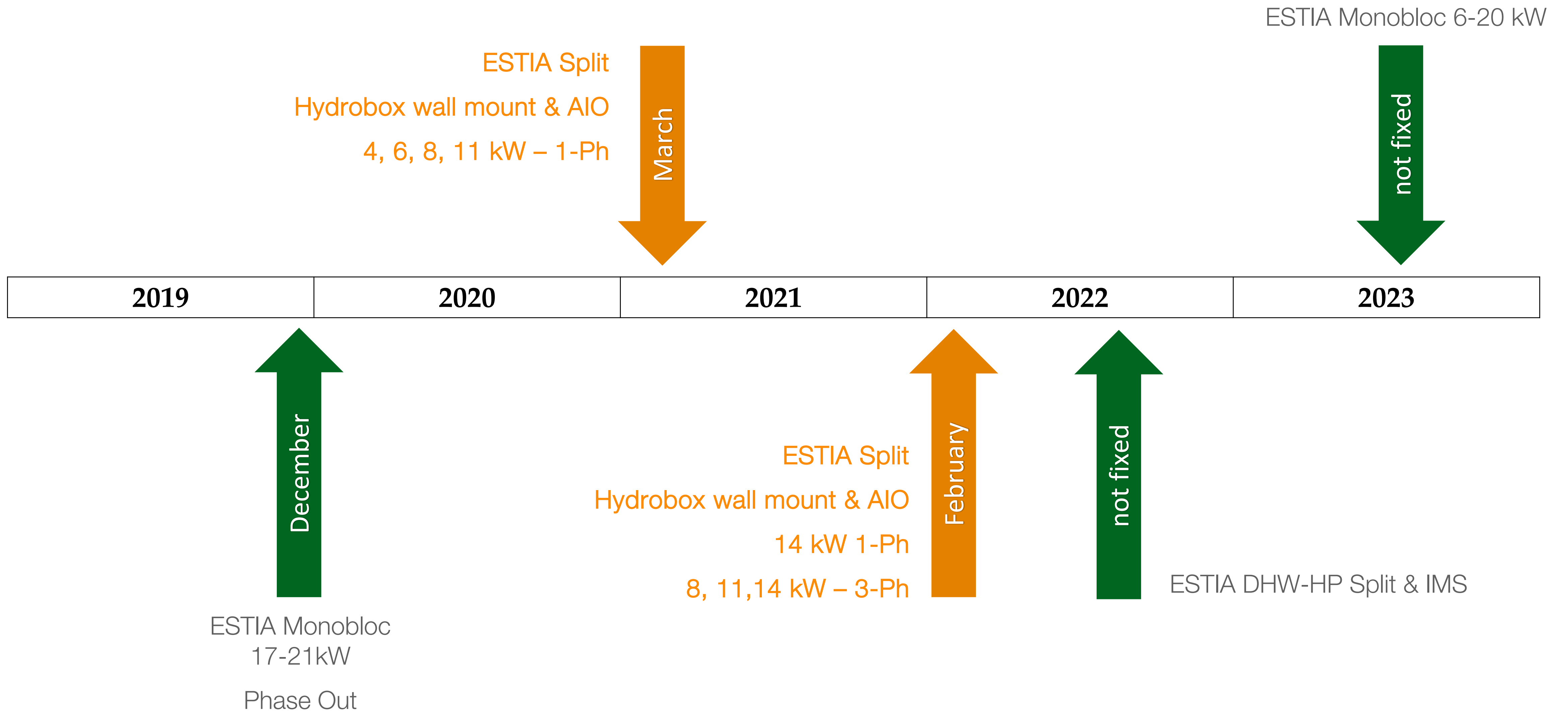
✓ Complete new ESTIA series 1 will be KEYMARK certified

KEYMARK Certificate



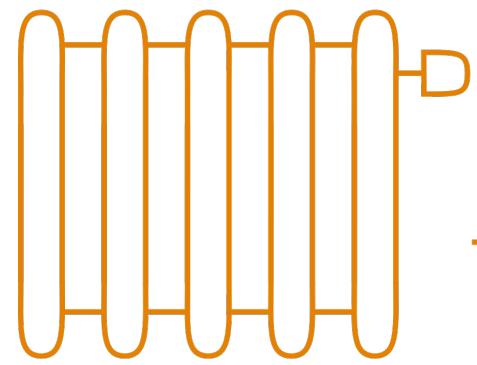


A2W heatpump systems – schedule & roadmap

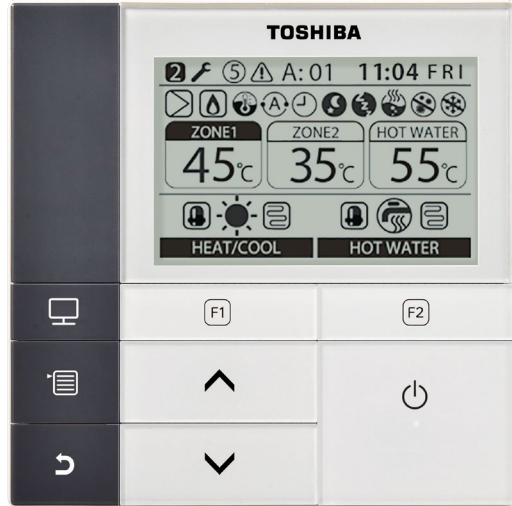


ESTIA Split Standard

Liquid comfort – hot & cold

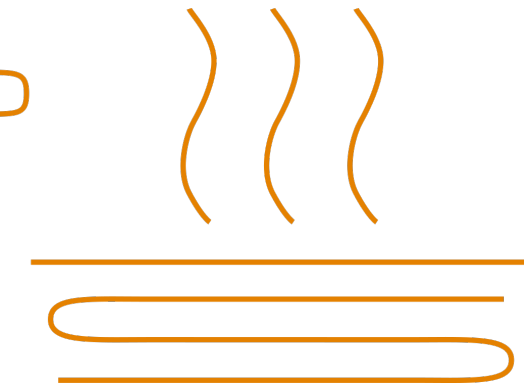
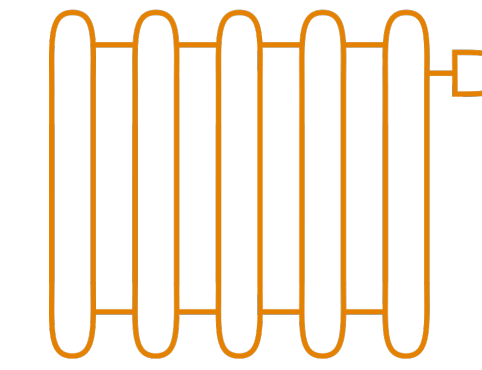


outdoor unit	capacity (h) kW	connectivity
HWS-455H-E	4,50	1-ph
HWS-805H-E	8,00	1-ph
HWS-1105H(8)-E	11,20	1-ph (3-ph)
HWS-1405H(8)-E	14,00	1-ph (3-ph)
HWS-1605H8-E	16,00	3-ph
hydrobox	backup heater kW	connectivity
HWS-455XWHM3-E	3	HWS-455
HWS-805XWH*-E	*M3/T6/T9	HWS-805
HWS-1405XWH*-E	*M3/T6/T9	HWS 1105, 1405, 1605

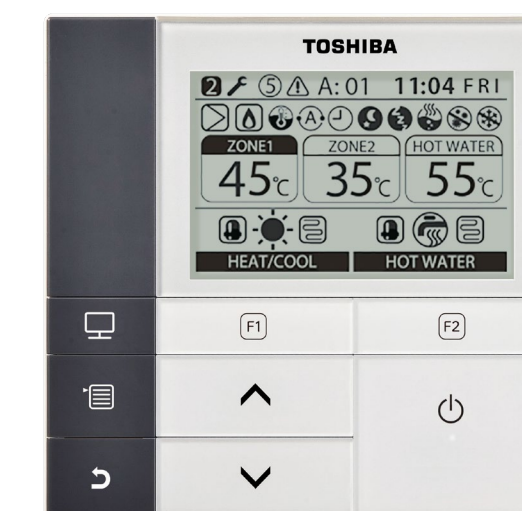


ESTIA Split Hipower

Liquid powerful comfort – hot & cold



outdoor unit	capacity (h) kW	connectivity
HWS-P805H(8)R-E	8,00	1-ph (3-ph)
HWS-P1105H(8)R-E	11,20	1-ph (3-ph)
HWS-P1405H8R-E	14,00	1-ph (3-ph)
hydrobox	backup heater kW	connectivity
HWS-P805XWH*-E	*M3/T6/T9	HWS-P805
HWS-P1105XWH*-E	*M3/T6/T9	HWS P1105, P1405



- ✓ Maximum supply temperature +60°C
- ✓ Minimum outdoor operation temperature -25°C
- ✓ Keeps nominal capacity down to the outside temp. of -15°C

ESTIA mono DHW

Flexible set & forget comfort

model type	tank (Ltr.)	design / variants
HWS-G1901CNMR-E	190	standard version
HWS-G2601CNMR-E	260	
HWS-G1901CNRR-E	190	variant water connection position
HWS-G2601CNRR-E	260	
HWS-G1901CNXR-E	190	+ deluxe PCB
HWS-G2601CNXR-E	260	
HWS-G1901ENXR-E	190	+ deluxe PCB + HEX
HWS-G2601ENXR-E	260	



ESTIA mono DHW

Basics!

- ✓ 2 Versions: 190 Ltr. & 260 Ltr.
- ✓ Water temperature from +50 to +65°C
- ✓ *Best in class* COP 3.57 (EN 16147)
- ✓ *Best in class* fan external static pressure
- ✓ *Best in class* noise level
- ✓ Wide operating range from -7°C /+40°C
- ✓ Corrosion protection with enamelled steel tank and magnesium anode



ESTIA mono DHW

User interface



Operation modes:

AUTO, ECO, BOOST, SILENT and HOLIDAY

Flexible control solutions:

- ✓ ModBus connectivity
- ✓ Smart Grid ready
- ✓ Photo-Voltaic ready
- ✓ Solar function with extra coil
- ✓ Air Cooling function

